

THE
JUNIOR SECONDARY COURSE
OF THE
CAPE PROVINCE
AND THE
DULL-NORMAL CHILD

(A Pilot-study based on Research in the Border Area
and North-Eastern Districts)

by

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I N T R O D U C T I O N

"The new junior secondary course is to be introduced into schools in 1953." This opening sentence of Publication E 321 of the Department of Public Education of the Cape of Good Hope marked the beginning of a new era of secondary education in the Cape Province. Directive E 321 introduced a course and organisation which was to put into practice the democratic concept of education i.e. secondary education for all and with the fervent hope of many that it would also meet the demands of the slogan propagated by Dr. W. de Vos Malan at a Teachers' Conference at Stellenbosch in 1946, namely "the right type of education for each."⁽¹⁾

The epochmaking and in important respects, revolutionary Report of the Commission on Technical and Vocational Education (de Villiers Report) published in 1948 paved the way for the introduction of a new system of education; a system more in accordance with current educational and psychological thought in England, Europe and America. The proposed new system would also be more in line with the democratic ideal of secondary education for all and would produce the enlightened, secondary school educated proletariat demanded by the technological age. There could be no doubt that the publication of this Report conditioned public and popular educational opinion to a state of preparedness to accept a new system. Al-

1. Report of the Commission on Technical and Vocational Education. p. 19.

though the new junior secondary course differs in basic organisation and in many respects from the proposed system advocated by the de Villiers Report, the latter prepared an optimum educational climate for launching the former.

In addition to this optimum climate the actual launching of the new course was wisely preceded by two important provisions,

(i) the introduction of a new primary course of seven years duration and

(ii) the extension of compulsory education from Std. VI or sixteen years of age, to Std. VIII or sixteen years of age with effect from January 1952.

Combined with a new enlightened policy of limiting the number of repeat-years in the school careers of primary pupils these provisions were designed to ensure that the benefits of secondary education would be extended to all pupils.

This aim was realised immediately on the transfer of Std. VI from the primary to the secondary area in 1953. The resultant increase of enrolment in the secondary area is best illustrated by the fact that the enrolment figure in the secondary area in the second quarter of 1953, after the transfer, was 48,807 as against an enrolment figure of 32,652 in the corresponding period of 1952.⁽¹⁾

Among the additional thousands now finding themselves in secondary schools one would expect to find a much wider ability-range than was formerly associated with the secondary school system. The old secondary

1. Report of the S.G.E. for 1957 p.5.

or high school was a selective institution; selective on a basis of intellectual ability. Its population represented socially and economically, a good cross-section of the community but intellectually it was representative of the mental elite only. Retardation in the primary school and an external Std. VI school-leaving examination constituted effective barriers for the protection of this intellectual sanctum against the invasion of those of lesser ability.

Now, not only were the portals thrown wide but a considerable portion of the traditionally primary population, the Std. VI pupils, were deposited fair and square in the new secondary ~~are~~ thus changing in one fell swoop the former intellectually homogenous secondary population into as heterogenous a group as ever attended a primary school. Those who could ^{stage} never arrive at the secondary school, by force of intellect have now arrived by force of law.

The situation brings to mind the words of Bertrand Russel quoted by Hollingworth:⁽¹⁾

"Under socialism I should hope to see learning so common, that it would be unregarded ----- Every boy and girl would be given as much education as the authorities judged desirable."

Hollingworth's comment is worthy of note:

"The mistake here lies in assuming that merit can assimilate as much education as authorities judge desirable".

J. L. Horn states:⁽²⁾

"The larger the percentage of the population retained for the upper grade, the high school and the College, the lower the average capacity of the group under instruction."

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1. Leta Hollingworth: Gifted Children, Their Nature and Nurture. p. 362.
 2. L. J. Horn: The Education of Exceptional Children, p. 70

This lower average capacity would be the result of the more normal distribution of intelligence to be expected when a larger percentage of the population forms the group under consideration; there would be besides normals and supernormals, also dull-normals and feeble-minded. Consequently in the new heterogeneous population of the secondary school there would be the normals and the supernormals, the dull-normals and perhaps even the mentally-deficient and the feeble-minded who have not yet been diverted to Special Classes. With those who are scholastically retarded, these mental deviates would constitute the backward group in the secondary school. It is with one section of the innately backward group that we are concerned in this study - the dull-normal group.

(a) The Dull-Normal Group:

Defining the dull-normal group is part of this investigation; at this stage suffice it to say that the word dull-normal is a technical psychological term indicating the mental ability group, according to innate intelligence, immediately below the normal group and immediately above the group of certifiable mentally handicapped pupils; the group popularly designated as dull but not taken up in Special Classes because they were considered able to acquire the normal Std. VI Certificate and they probably did, more often than not. With the very high incidence of retardation which prevailed in the old primary school it may be ^sassumed that those who were successful acquired the coveted Std. VI Certificate at so late an age that they left

school to take up employment in those avenues where this Certificate was the "open Sesame". Those who failed in the Std VI examination were eventually saved from unutterable boredom by the schoolleaving age of 16 years. In either case the secondary school was beyond the horizon of these pupils who now find themselves drafted into the secondary era.

For the purpose of this introduction it is not considered necessary to go beyond the preceding description of the dull-normal group. For the present we assume that (i) such a group exist and (ii) since 1953 pupils of this intelligence-group should find themselves in the secondary school from approximately thirteen years of age.

(b) Secondary Education:

What do we mean when we say that the child is now in the secondary ~~area~~? What is meant by secondary education? The best definitions of education are those expressed in terms of aims. As there may be differences in aims of education there are also differences among educationists as to what is meant by secondary education. There is no doubt that the popular conception of secondary education is that of a stage in education.

The first known use of the word "secondary" appeared in the "Report et projet du decret sur l'organisation generale de l'instruction publique" submitted by Antoine-Nicolas de Condorcet to the Legislative Assembly of Revolutionary France in 1792. In

the "Rapport" he proposed the setting up of "ecole primaires" in villages and "ecole secondaires" in Departments.⁽¹⁾ According to the same source the word was first appeared in print in England in a series of letters contributed by Dr. Thomas Arnold to the Sheffield Courant in 1832. His illustrious son Matthew, popularised the term and it was used in 1868 in the Report of the School Inquiry Commission and obtained official status with the appointment of the Royal Commission on Secondary Education (the Bryce Commission) in 1894.⁽²⁾

In the Cape Province secondary education was popularly regarded as the stage following on the primary stage; whether the organisational and educational facilities for the two stages were housed in separate buildings or in the same building made no difference to this stage definition. The primary stage was considered to include the school standards Sub Std. A. to Std. VI (before the reorganisation) and the secondary stage comprised Stds. VII to X. This type of definition is convenient for organisational purposes but should not be allowed to dominate educational thought in this matter because it gives no idea of the particular aims and functions of each section.

H. C. Douglas gives the following definition of secondary education which, at the same time, shed some light on the function of primary education:

"Secondary education is that period in which the emphasis is shifted from the study of the simpler tools of learning and literacy to the

1. H. C. Dent: Secondary Education For All, p. 2.
2. Ibid.

use of these tools in acquiring knowledge, skills and appreciation in the various major fields of human life and thought."(1)

This definition reflects the general attitude of practical educationists; the primary school provides the tools of learning and the secondary school provides the opportunity for applying these tools for the acquisition of knowledge and skills and further tools as preparation for living or further learning.

Definitions in terms of aims are inclined to highlight the divergent viewpoints of the vocational educationist and the classical protagonist. Since the salient features of these differences are dealt with elsewhere in this study it is not considered necessary to pursue a solution to this educational perennial any further at this stage. The aims and organisation of secondary education with which we are particularly concerned are those of the junior secondary course and that is fully investigated in this study.

(c) Motivation for this study:

It is not customary to supply the motivation for a particular investigation but in this case the writer is of the opinion that it would serve a useful purpose to indicate why this particular investigation was undertaken at this stage.

The junior secondary course was inaugurated at the

1. H. R. Douglas: Secondary Education for Youth in Modern America.

beginning of 1953, the year in which Std VI became part and parcel of the secondary school; the first year in a three years Course for the Junior Certificate. This means that the pupils who entered the Course in Std. VI in 1953 could be expected to write the Junior Certificate examination in November - December, 1955.

Towards the middle of 1955 the writer, in the course of official duties, noticed that several pupils who would be classified as dull-normal have abandoned the junior secondary course and were seeking employment. Consequently the writer compiled, from his official nominal rolls of pupils who have been given intelligence tests in 1952, a list of 70 names of pupils with I.Q.'s below 95. These pupils have been admitted to the first year of the new secondary course in four high schools in the Border area of the Cape Province, in 1953.

Investigations revealed that of the 70 only 12 *pupils* had managed to reach Std. VIII and all the rest had left school, mostly in Std. VI, to seek employment. Subsequent investigations revealed that of the 12 who remained, 6 passed in the examination for the Junior Certificate at the end of 1955. This means, in effect, that only 6 pupils out of 70 or $8\frac{1}{2}$ per cent completed the course successfully.

In the preface to his "Secondary Education For All" (p. v) H. C. Dent stated in respect of the English Education Act of 1944, which made secondary education compulsory for every boy and girl in England and Wales:

"An unprecedented experiment of the utmost importance, has thus been launched. What course will it take? How valuable will it prove? Many years must elapse before full answers to these questions will be known.

But they will be known, the sooner, and with more certainty if continuous critical study of the experiment is made as it proceeds."

David W. Oates⁽¹⁾ is in complete agreement as regards the urgency of immediate investigation to ensure the success of a new system:

"Common sense alone is not sufficient to solve our problems ----- . The task is already before us: there is no possibility of delay, and we have to apply to it the tools which are available. If we wait to make an exhaustive examination of all the problems involved --- or if we wait for the development of perfect machinery ----- there can be no progress in education for a generation."

In view of these expressions of the urgency for investigation of a new system and in view of the results of his limited investigation in 1955, the writer considers that an investigation along the lines of the present one was not only opportune but urgently necessary.

(d) Aims of Dissertation and Investigation:

The aim of this dissertation is to analyse and evaluate the results of the new junior secondary course in respect of the dull-normal child: In a speech delivered in Cape Town in 1955, the Departmental Psychologist of the Cape Province expressed his view in this connection as follows:

"Soos ek dit sien sal hierdie nuwe stelsel staan of val by die doeltreffende versorging van die dom-normale kind. Dit is die eintlike toetssteen."

In 1956, the present Deputy-S.G.E. of the Province, Mr. D. J. Liebenberg, said at East London:

"The fact that hundreds of pupils who would have left school at the completion of the

old primary school course, are now compelled to remain at school until they have reached the age of 16 years or have successfully completed Std. VIII, is forcing teachers to adjust themselves to a new organisation which is designed to accommodate those who would normally have left the school, profitably to themselves without creating in them a sense of frustration. They are at school according to the law of the land and it is incumbent upon us to provide for them to the best of our ability and to devise means and methods of teaching to attempt to satisfy their particular needs with due regard to their level of achievement. Some of these pupils may merge into the groups to which we were accustomed under the old secondary school system but others will create problems ---- which will require all our ingenuity and resourcefulness to solve."

How well did the junior secondary course succeed in meeting the needs of the dull-normal child? That is the question which this investigation will attempt to answer.

It is not the purpose of the writer to determine experimentally the educational method, procedure, curriculae etc. which will produce the best results. That will remain the task of follow-up studies to this investigation. The immediate task is to evaluate the results of the existing system as reflected by the school careers and achievements of a group of dull-normal pupils on the basis of what the Scottish experimentalists might call "by their fruits ye shall know them."⁽¹⁾

Studies regarding method, procedure and curriculae could only have value if they follow on studies of evaluation; they should only be undertaken once the results of the existing methods, procedures and curriculae are known and when it is considered necessary

1. W. Mc Clelland: "Selection for Secondary Education" p. 48.

to change the existing order with the object of achieving different results. For that reason this investigation is referred to as a pilot-study. If successfully executed it should indicate the directions in which further research in respect of the new secondary organisation is urgently required.

To achieve the aim of the investigation it would be necessary to

(i) trace the background of educational development in general and secondary education in particular in the Cape Province;

(ii) study the system designed to meet the needs of the dull-normal child;

(iii) identify the dull-normal group and to study some of their characteristics;

(iv) study the school careers and achievements of a group of dull-normal pupils, in other words undertake a case-group study with the aid of objective tests, a personal questionnaire and school examination results;

(v) analyse the information acquired under (iv) and

(vi) to draw conclusions from these in order to evaluate the results of the junior secondary course in respect of the dull-normal child.

(e) Program of this Study:

The dissertation consists of an introduction, and sections A, B and C.

(i) THE INTRODUCTION is a very brief synopsis of developments which led up to the origin of the problem, the problem and the aims and program of this study.

(ii) SECTION A, designated as "THE ORIGIN OF THE PROBLEM" is a compilatory, analytical and critical survey of the development of "secondary education for all" and "the right kind of education for each" in the Cape Province; of the proceedings, findings and recommendations of the Commission on Technical and Vocational Education (de Villiers Commission) and of the Junior Secondary Course. It also includes the general description of the dull-normal as an adolescent and indicate criteria for identification.

(iii) SECTION B is designated as INVESTIGATION OF THE PROBLEM. The methods of investigation are described and motivated. The selection of the case-study group and the instruments for the investigation are described. The results of the tests, questionnaire and school achievement are tabulated and statistically and analytically interpreted.

(iv) SECTION C is designated as UNDERSTANDING THE PROBLEM.

The findings of Section B are summarised, analysed and synthesized and recommendations formulated accordingly.

More detailed particulars, giving the main objects and contents of each chapter, are provided in the general index.

The questionnaire used and the bibliography are appended after the concluding chapter.

SECTION A.

ORIGIN

OF THE PROBLEM

CHAPTER ISECONDARY EDUCATION
FOR ALLI. INTRODUCTION.

Our problem as briefly indicated in the Introduction to this study calls in the first instance for a developmental approach. The normal development of educational ideals in respect of the democratic concept of education progressed through the three stages "EDUCATION FOR ALL" to "SECONDARY EDUCATION FOR ALL" to "THE RIGHT KIND OF SECONDARY EDUCATION FOR ALL." This is the natural and logical development to be found in the educational histories of modern states.

Although the order is the same it is also natural that the routes of progress between the various stages, the methods employed, yes, even the motives for such development will differ from one country to the next. The factors which inspire towards and the factors which mitigate against the development towards the ideal would be determined by the traditional educational aims, national aspirations, racial characteristics, international contacts, cultural, economical and social standards, fetishes, fears and hopes and all the other factors which go into the formation of ethnological and/or political groups.

H. C. Dent in his "Secondary Education For All" mentioned one way (p. 4) by which progress towards the idea of secondary education has been made in England, as being "----- by way of recurrent upthrusts by the

elementary school."

This admirable development was however not appreciated by the vested interests who were more interested in child labour than in child education. Even the Ecclesiastical powers were not in favour of this development. Ernest Green in his "Education for a new Society" (p.6) quotes the Rev. J Twist as warning in his "Policy of Educating the Poor" (published 1822) that education would give "---- the lower classes the absurd notion that they were on a footing with their superiors in respect of their rights of mental improvement; it would be as dangerous to the public peace as the projects of certain revolutionary maniacs who teach the people that the convenience of man and not the Will of God has consigned them to labour and privation."

The attitude evinced in such utterings is in sharp contrast with educational development in Scotland where it was almost incumbent on the teacher to prepare the "lad o' pairts" for University entrance, or in the U.S.A. where one of the first statutory provisions for education "The Old Deluder Satan's Act" was inspired by religious motives.

The conclusion is that in any attempt at evaluating a current educational system or organisation it is essential to study the genesis of the system or organisation in its own milieu. In this chapter therefore I propose to

(a) trace the historical development of education in the Cape Province in order to identify features which eventually would be helpful to evaluate the system and

(b) analyse the findings and recommendations of the Report of the Commission on Technical and Vocational Education in as far as it is relevant to this study.

II. HISTORICAL DEVELOPMENT OF EDUCATION IN THE CAPE.

(a) Democracy in South Africa.

Before proceeding to outline the growth of Secondary Education it is important to point out that in the multiracial society of South Africa the terms "democracy" and "education for all" and "secondary education for all" has a different connotation to that generally accepted in the rest of the Western World.

In South Africa democracy in a political as well as in an educational sense is of significance only when used within the confines of the European group. The Europeans whose forbears came from Holland, England, Scotland, France and Germany threw up (with the exception of the first years of the settlement at the Cape) an impenetrable social and educational barrier between themselves and the non-European and native population.

The mere existence of a "coloured" and a "native" problem has influenced the growth and direction of European education in South Africa. The Dutch Reformed Church as one of the most powerful driving forces in educational development in this country has always held one of its main tasks to be the survival of European Standards of civilization, even in respect of the lowliest members of the congregation.

There has always been the growing fear that the lower orders of Europeans would degenerate to such an extent that in earning their livelihood they would find themselves in economic competition with the Native, thus jeopardising the survival of European civilization. Extension of universal European education was one of the

prophylactic measures adopted by the Dutch Reformed Church against such a development.

It was necessary to stress this aspect early in this discussion not only to emphasise the extremely important part played by the D.R.C. in furthering the cause of education (1), but also to indicate why, in the development of our theme, Native and Coloured education is excluded from the general conception of "secondary education for all." As a matter of fact it may not be too equivocal to state that the growth of the idea of secondary education for all (Europeans) was largely inspired, certainly accelerated and characteristically formulated by the awareness of the presence of the Black Man of Africa. (2)

(b) Ecclesiastical Control.

According to Theal (3) the Ecclesiastical Court that was established in August 1665 after the arrival of the first resident clergyman, the Rev. Johan van Arckel, at the Cape, was constituted as follows: (1) a member of the Council of Policy, (2) the Clergyman (an official of the D.E.I.C.), (3) deacon selected by the Council of Policy from a list furnished by the Court itself and (4) the Elders.

1. Dr. E. G. Malherbe in "Education in South Africa," 1652 - 1922, p.109 quotes the leader of the Cape Times of 3rd Nov., 1924, as stating: "It is hardly too much to say that the Cape would not have a system of education at all, had it not been for the energy and devotion of the Dutch Reformed Church."

2. This is merely a statement of fact. Comments on the Christian or political ethics of the situation and policy is outside the scope of this study.

3. G.M. Theal: History of South Africa before 1795, p. 150.

"Such was the constitution of the consistory or ecclesiastical court, which had primary control of all purely religious observances, and the direction in the first instance of all educational institutions during the whole period of the East India Company's government of the colony. It was in one sense merely an engine of the state and it was always and in every case subordinate to the Council of Policy. In practice it was guided by the decrees of the Synod of Dort and by precedents of the courts of the fatherland -----" (1)

During these early years the Church dominated all aspects, not only of education, but of life itself at the Cape. "The most important thing in every colonist's life was to qualify for membership of the Church. Without church membership you could not marry, you could not beget, you could not die, at least, not in a socially acceptable sense." (2)

The D.R.C. being a Protestant Church, it was incumbent on a member to be able to read the Scripture for himself and to be able to write his own name and to recite the articles of faith. This last requirement kept alive a tradition of formal education and for many years and in most cases the immediate function of education was the preparation for "aanneming" i.e. acceptance as a full member of the Church.

How closely the first schools in the settlement were associated with the Church can be gathered from the fact that the "Kranckenbesoeker" (Sick Visitor) was

1. Ibid. p.150.

2. E. G. Pels. "Three Hundred Years of Education in South Africa. p. 2.

also the teacher. In initiating and guiding the organisation of education at the Cape the local D.R.C. was giving excellent effect to the educational demands of the National Synod of Dort (1618 - 1819) in respect of Education in Holland i.e. " ----- dat skole gestig moet word op die platteland, in die dorpe en in die stede. Godsdienstige onderrig moet gegee word. Die Christelike owerheid behoort toe te sien dat ----- bevoegde persone onderwys gee. Die kinders van die armes behoort gratis onderrig te word. In alle skole behoort alleen ortodokse Christene as onderwysers op te tree." (1)

Even the instruction regarding the children of the poor was carried out at the Cape by the establishment of poor schools (diakonie-skole) which was supported by Church funds. (2) Although there was at this early stage no question of secondary education, the Church Council of Cape Town decided in 1790 to provide some elementary education in reading and writing, for adults. The decision of the Council was " ----- om bejaarde personen die lust hebben in het leeren leesen en schryven, dóg onvermogen zyn, te permitteeren om s' Kerkwegen te mogen gaan by de schoolmeester, Christiaan Mens waarop treffens goedgevonden is om aan gemelde schoolmeester, Mens -----25 rds. jaarlyks tot een douceur toe te leggen". (3)

1. Quoted by E. G. Malherbe, op. cit. p. 22.

2. J. de Wet: Geschiedenis der Nederduits Hervormde Kerk in Z.A. (1652 - 1804) p. 24.

3. P. F. Greyling: Die Nederduits Gereformeerde Kerk en Armesorg. p.11 Quoted from Spoelstra's Bouwstoffen II.

The aims of education were set out in the "Bataafse Kerkorde" as follows: " --- vereerst de jonge jeugt de vrees des heeren in te scherpen, haer te onderwysen in de fundamenten van de Christelyke religie; haer te leeren bidden, singen, met haer Kerk te gaan, te catechiseren; ten andere haer te leere haere ouders, overheeden en meesters te gehoorsaemen; ten derde haer te leeren leesen, skryven ende cyfferen; ten vierde haer te leeren alderley goede seede ende manieren ---" (1)

From the teachers were expected "singuliere gaven, godtsaligheyt, ootmoedigheyt, zedicheyt, goet verstant, ende discretie, mitsgaders gaven van welsprekentheyt --"(2)

The first school ordinance promulgated by the Governor de Chavonnes in 1714, codified the existing educational organisation by providing for the study of Latin, the payment of schoolfees and the segregation between the sexes at school. It also established a Board of Education, called the Scholarchs, which was little more than a sub-commission of the local "Kerkraad." This was really no innovation since it was one of the functions of the Church Councils in the areas outside Cape Town to stand guard over matters educational. (3)

Steeped in the Calvinistic tradition it was possible for the more intrepid colonists to sally forth into the interior, crossing the mountain barriers and hacking out of the wilderness a new country, in the full conviction that their traditions will be maintained. The Bible, to these colonists who were penetrating deeper and deeper

1. Ibid p. 11.

2. Ibid p. 12. Quoted from the Church Ordinances for the East Indies.

3. Ibid p. 12.

into the interior, was not only the source of spiritual solace but also a textbook of history, geography, philosophy and, not infrequently, it was used as a primer for the first reading lesson.

(c) Wandering Teachers.

E. G. Pells (1) points out that " ---- throughout history the early days of formal education in all lands, particularly during periods of social transformation, have been characterized by the presence of a large body of wandering teachers."

Similarly then, to the Sophists of Greece, the Mendicant Scholars of the Middle Ages, the Jesuits of the Counter Reformation *etc.* the itinerant teachers of the 18th Century Cape Colony trekked from one farm to another. Many of them were navy and army deserters or D.E.I.C. clerks seeking refuge from the law in the wilds of Africa.

That they presented a motley array with generally few qualifications for the task of educating the children of a growing young nation is true. But if they could give little, they also received little and as the Watermeyer Commission pointed out, only better salaries would attract better teachers.

In spite of the bad name that these "vagabond" teachers acquired through the years, there is no doubt that they filled the educational demands, if not the needs, of the interior.

A ny attempt at a definite system of education with established schools in the interior in the early days

1. Op. cit. p. 16.

would have been sheer waste of money. The most important function, and in many cases the only function as far as the colonists were concerned, was a religious, or perhaps more accurately described, an ecclesiastical one. In teaching the rudiments of reading, writing and numbers the wandering teachers met these demands.

The nomadic nature of the frontiersmen discriminated against a system of school organisation. At the first S. A. Irrigation Congress held at Robertson in 1909 the then Minister of Lands, the Hon. F. S. Malan, stated that "the history of the people was (1) that of the Voortrekkers who trekked hither and thither over the ground, (2) that of the farmers who beaconsed off pieces of ground and farmed on it and (3) that of those who lived on and worked in the ground." ⁽¹⁾ It was impossible to establish a system of organised education of any kind, let alone secondary education, before the transition from the first to the second of these stages had been completed, and it was difficult to establish until the transition from the second to the third stage had taken place.

(d) Slow Progress.

Pells points out ⁽²⁾ that if the development of education in the Colony appears to be slow, one must bear in mind that the European settlement at the Cape of Good Hope had been in existence for over 150 years before the population reached the 25,000 mark.

In 1804 Commissioner de Mist, well-versed in the

1. Proceedings of the First S. A. Irrigation Congress, 1909.

2. Op. cit. p. 12.

political philosophy of Revolutionary Europe, brought about the formal divorce between Church and State at the Cape. Also in the sphere of education he inaugurated the principle of secular control and appointed a School Commission responsible to the Governor for this purpose. Needless to say this Commission was comprised mostly of clergymen! By 1813 the name was changed to the Bible and School Commission.

No real improvement in the facilities and standard of education took place before the 1830's i.e. until it had become clear that the Cape will remain an English possession. At Cape Town a company of shareholders had established the South African College to provide "higher" education. For the greater part of the century, however, this College prepared candidates for the Matriculation examination, first of London and later of the University of the Cape of Good Hope. The South African College was, in other words, a secondary school only.

(e) Genius at Work.

During this decade chance has thrown together at the Cape four brilliant men who now turned their attention to formulating and establishing a system of education for the Colony. They were Sir John Herschel, Astronomer; John Fairbairn, educator, journalist and indomitable fighter for the freedom of the Press; Colonel John Bell, Colonial Secretary and Sir George Napier, Governor of the Colony.

As a result of their persuasion Lord Glenelg approved a Government-Memorandum (1839) in which a new educational system was announced for the Colony.

The new system provided for the appointment of a Superintendent General of Education, the first official of his kind in the world. A well-known educationist of the Cape, James Rose-Innes, was appointed to the post with full and autocratic powers over all aspects of education.

Provision was made for differentiating between two types of schools i.e. First Class Schools with both primary and secondary departments and Second Class Schools with primary departments only. Fees were payable for secondary education, but bursaries were available.

With the introduction of Third Class (State-Aided) Schools and the acceptance by the D. R. C. of this system, elementary educational facilities were extended throughout the Colony.

(f) Secondary Education Stirs.

A feature of the development of secondary education over the next two decades was the establishment of "Colleges" for "Higher Education" at Port Elizabeth (Grey), Graaff-Reinet (G.R.T. College), Somerset East (Gill) *etc.*... These Colleges, together with a few state-aided schools at Paarl and Stellenbosch, provided most of the "secondary education" in the Colony.

"Post-Matriculation work was done if and when students were forth-coming."⁽¹⁾

The Church of England established the Diocesan College at Rondebosch and St. Andrews College at Grahamstown and offered more or less the same type of

1. E. G. Pels, op. cit. p. 28.

education as the other Colleges.⁽¹⁾

The Matriculation and post-Matriculation examinations were conducted by an Examining Board, established in 1858.

The Education Act of 1865 gave effect to the recommendations of the Watermeyer Commission of 1863 by codifying the existing educational practices and regulating and providing for the salaries of teachers. In the case of First Class Schools in the larger towns it was stipulated that the Primary Course would comprise reading, writing, arithmetic and descriptive "geography."

The secondary course at the First Class schools would comprise Latin, Greek, English, Literature, History, elementary Mathematics and Physics. Second Class schools had a similar Primary Course but in the secondary course only elementary Latin, geometry and elementary algebra were taught.

The Third Class Schools had to provide for the teaching of at least the 3 R's.

The extremely meagre secondary fare that was offered, can be judged from the fact that the Act of 1865 made provision for the salary of only one assistant teacher for First Class Schools and none for Second Class schools.

The fast development of all aspects of education during the last three decades of the 19th century in the rest of the Western world was also experienced at the Cape.

"Secondary education developed rapidly and embraced

1. The D.R.C. never established Church Schools (excepting Industrial Schools) in the Cape probably because they regarded all schools, whether Government controlled or state-aided, as their special domaine. This attitude has lasted until the present day.

the modern side, although the old classical curriculum died hard. Well into the twentieth century the futile and pathetic process of driving the declensions and conjugations of dead languages (Latin and Greek) through the medium of what for the majority of pupils was virtually a foreign language (English), into the reluctant heads of the children of the veld, was vigorously carried on by a gallant band of English and Scots teachers with no professional qualifications other than an academic training in classics and little equipment other than the cane."⁽¹⁾ However the modern subjects such as handicrafts and nature study or "natural history", as it was called, was gradually introduced.

An event which had a lasting and important effect on education, even to the present day, took place in 1873 i.e. the establishment of the University of the Cape of Good Hope. This was an examining body which had powers to grant degrees and which, more important, governed the entrance to University by the Matriculation examination. This examination and its Junior counterpart the "School Higher" dominated the curriculae as well as the spirit of secondary education in the Cape for generations.

The demand for secondary education continued however and by 1890 there were 53 First Class and 74 Second Class schools which offered some secondary work. Although this was the case, there was no organised secondary curriculum above the elementary standards. Science studies were conspicuous by ^{their} ~~its~~ absence until the new Superin-

1. E. G. Pels, Op. Cit. p. 36.

tendant, Dr. Muir, made it his business to place science teaching on an equal footing with the classics.

At the close of the Century, at a time when Muir introduced his system of High Schools, there were not quite 2,000 secondary pupils in schools in the Colony.

In changing some of the better First Class Schools into High Schools, Muir embarked on one of the first attempts ever undertaken to "dovetail the curricula of the elementary and secondary schools." (1)

This was an extremely important step in the development of "Secondary Education for All." All of the new high schools had their primary departments as well, which means that a child with the necessary ability could start at the K.G. level and progress through all the stages of primary and secondary education in one and the same school. In theory this sounds as if the educational heaven of secondary education for all had descended on the colony at a time when England was still struggling to introduce a system of secondary education. In practice the position was quite different, however.

(g) Barriers to Progress.

In the Cape the provision of secondary education was not only a matter of establishing and maintaining schools; it hinged on the problem of long distances and vast open spaces. The policy of taking the school to the child was practicable at the primary level but not at secondary level. With schools with secondary departments sparsely spread over a sparsely populated area the problem of disseminating secondary education

1. Ibid. p. 45.

became a problem really, of providing boarding schools.

Closely allied to this there was another vital problem developing towards the end of the century i.e. the emergence of the socio-economic problem of the "Poor White." Towards the 1890's the large landless class of pastoral farmers or "bywoners" suddenly found that the "lekkerlewe"⁽¹⁾ of the pastoral farmers were over. To the North the discovery of immense mineral wealth has brought the rumblings of approaching war but also the way of life of modern times.

"Upon the entire remoteness of the veld the invasion of the instruments and the men of modern industry and commerce had a disturbing effect. The new towns meant a money economy instead of a subsistence economy. The new industries meant the habits of the nineteenth and twentieth century. Before the tide of economic progress the slipshod habits of a subsistence economy became improvidence and the old easy-going ways became indolence punishable by bankruptcy and impoverishment."⁽²⁾

Barred from their nomadic ways of life by title-deeds and farm boundaries, strange to the ways of town life and with no industrial skills whatsoever, they descended fast down the economic ladder.

"At the base of white society had gathered, like a sediment, a race of men, so abject in their poverty, so wanting in resourcefulness that they stood dangerously close to the natives themselves."⁽³⁾

1. Eric Walker. The Great Trek. p. 31.

2. C. W. de Kiewiet. A History of South Africa, Social and Economic. p. 186.

3. Ibid. p. 181.

(h) Education an Antidote to Poverty.

The Dutch Reformed Church turned on the danger of "Poor White-ism" with all arms engaged. The Synod of 1894 "-----neme in overweging welke stappe dienen genome te worden om de verachterde leden onzer Kerk op te heffen uit de gezonken toestand waarin Zy vervallen zyn, en hunne Kinderen te brengen binnen het bereik van gewone of industriële scholen." (1)

From the 1894 session of Synod emanated the first policies the Church were to pursue in its struggle against Poor White-ism. Obviously the Church was concerned with its own members only but the measures adopted exercised at one time or another great influence on the whole educational structure of the Colony. The measures adopted were the establishment of (i) irrigation schemes, (ii) industrial schools and (iii) Indigent hostels (Arm koshuise).

(i) Irrigation Schemes:

The development of a huge irrigation scheme at Kakamas on the Orange River was undertaken, not only to provide the poor with an opportunity to earn their own living, but also with the object of concentrating large numbers of these white nomads at one spot where their children could be saved by education. The scheme was started on 4th July, 1898, and fourteen days later the first school was opened. All the aims of the Church were realised and the whole project turned out a colossal success, socially, financially and educationally. By 1915 there were 700 children attending the schools of Kakamas with twenty teachers, ten of whom were children of the "Poor Whites" who started Kakamas. (2)

1. Acta Synodi 1894 "Skema." p. 4.

2. Acta Synodi 1915. Appendice 32.

The example of the Church was eventually emulated by the State and irrigation schemes were developed all along the Vaal and Orange Rivers, thus not only changing the living and working habits of a pastoral people but also bringing education, both primary and secondary, to thousands of children.

(ii) Industrial Schools.

Vocational training was another measure with which the Church hoped to fight indigency. The first industrial schools in the Cape were established by the various Mission Societies, for coloured and native youths. Apart from an abortive attempt by the Education Dept. to establish something similar (vide infra) in District Boarding Hostels there were no facilities for trade instruction for Europeans.

The Church accordingly established its own institution known as the "Arme Jongens Inrichting" in Cape Town in 1894. ⁽¹⁾ Similar institutions were established at Uitenhage, Stellenbosch, Adelaide, Oudtshoorn and elsewhere. These schools offered three-year courses in cabinet-making, wagon building, shoemaking, upholstery, tailoring, e.t.c.

In spite of being state-aided these institutions did not meet with the expected measure of success. The management was inexperienced and the instructors inefficient. The country lacked an artisan-tradition, and pride of workmanship as far as handicrafts were concerned, was non-existent. The handicrafts of a pioneer-nation must of a necessity be of the improvised type rather than of

1. P. F. Greyling, Op. Cit. p. 127.

the meticulous continental type. In addition, due to the particular circumstances of their birth, the vocational or industrial schools were too closely associated with poverty and this stigma has attached to them ever since. Combine with these factors the traditional South African attitude towards "kafferwerk" (work normally done by a native and therefore only fit for a native), and keeping in mind that the first trade schools in the Colony were established for coloured and native youth, the failure of these schools is not surprising. Even at Kakamas where the Church had complete control over its members, the establishment of an industrial school was a failure where-as the ordinary school next to it was bursting its seams.

Small wonder that as early as 1899, the S.G.E., referring to these industrial schools stated in his report " --- it would be most impudent to add a single additional school to the list." (1)

The failure of these schools, and more important, the factors that caused the failure, exercised a strong influence on vocational as well as secondary education ever since.

The Church Industrial Institutions were eventually taken over by the Union Education Dept. in the period 1922 - 1925 after an agreement has been reached between the Union and Provincial Education Depts. which made the former responsible for Vocational education.

(iii) Indigent School Hostels (Arm Koshuise)

This third measure adopted by the Church to meet

1. Ibid. p. 130.

the threat of European poverty was an extremely important one and had a powerful bearing on the development of secondary education for all, in the peculiar conditions pertaining to the Cape Province.

The Church with various forms of assistance from the Education Department established Indigent Hostels all over the Cape "platteland." The object was to bring the child to the school; the D.R.C. never having been a great believer in dotting the countryside with farm schools.

These indigent hostels achieved their object admirably but two problems developed out of their existence.

Firstly, the indigent hostels were intended only for pupils up to the Std. VI stage i.e. the end of the primary stage at the time. The parents soon discovered that their sons and daughters leaving school with a Std. VI certificate were not really prepared to earn their own livelihood. Having lived in the Indigent hostel in the village, the farm children have been divorced from farming interests and no other interests or abilities have been substituted.⁽¹⁾

An attempt was made by the Education Dept. to transform some of these Hostels into Hostel Industrial Schools by appointing technical instructors to their staffs. The idea was that boys should be taught some trade in the afternoon. Also this attempt at vocational training ended in utter failure.

"Het is de plicht van de Staat en niet van de Kerk om de best mogelyke sekulaire opvoeding aan elk kind in de Staat te verschaffen, zy het arm of ryk, en in te

1. Ibid p. 114.

zien dat deze Kosthuizen voor behoeftige leerlingen niet slechts filantropies maar opvoedingsinrichtingen zyn," states the Commission for Hostels in the S.G.E.'s report of 1922.

Hostels have been established by the secular authorities for the accomodation of pupils whose parents could afford to pay for their board and lodging. Out of this situation developed the second problem i.e. the visible stratification of pupils, sometimes of one school, in small villages and towns throughout the Province. In most villages there were two hostels, *one* a fee-paying one, controlled by the secular authorities and ^{one} a poor hostel controlled by the Church.

This unhealthy and unnatural position must have been responsible for much human suffering, hurt pride and childrens' tears. Eventually after many years the large number of pupils in secular hostels who were in receipt of boarding grants to enable them to obtain a secondary education, and the growing number of pupils who were retained in the indigent hostels, also with the object of obtaining secondary education, resulted in a slow merger of the two types of institutions.

Today the merger is complete in most areas and the ideal of the D.R.C. to bring the child to the school has been realised. Actually, this development, by providing for the physical factor of proximity of child and school, played an important part in the transition from "education for all" to "secondary education for all."

(i) Compulsory Education.

Human nature being what it is, it has never been found possible anywhere in the world to institute a

system of education without introducing compulsory clauses as regards school attendance. The Cape was no exception.

The Anglo-Boer War (1899 - 1902) stimulated the economic, social and also the educational life of the Colony. Fresh from the battlefields many young "Burgers" from the North went straight into the predominantly English schools of Cape Town, some to carry on with their education, others to go to school for the first time.

It was the period of educational giants. The influence of the great Scots schoolmasters and Scots "dominees" of the period has never died and their names are today still mentioned with awe and veneration. Their strict discipline and sturdy devotion appealed to the more prosperous, patriarchal type of South African parent whose pride it was to be able to send their sons to the schools of Grahamstown or the "Boland."

Although there was this interest in education, it was still estimated that there were twenty-thousand children in the Colony who were not receiving proper education.⁽¹⁾

The establishment of a form of local control was a prerequisite to the introduction of compulsory education and this was accomplished by the establishment of School Boards in 1905. These Boards would have fairly wide local powers but the S.G.E. could also exercise effective control through its Inspectorate. The School Boards had powers to make school attendance compulsory for children between 7 and 14 years in its

1. E. G. Pells Op. Cit. p. 66.

own area.

The School Board of Kenhardt, the first to apply the compulsion clause, did so in 1906. By 1910 a total of 91 out of 119 School Boards were operating the compulsion clause.

After Union, the policy of compulsory school attendance ~~was~~ extended throughout the Cape Province for all European children between 7 and 14 years of age, who have not passed Std. IV and who were not living beyond a distance of three miles from the nearest school. In 1917 the limits were raised to 15 years or Std. V and in 1919 to sixteen years or Std. VI where it remained for more than fifty years.⁽¹⁾

Compulsory primary education is fundamental to the development of secondary education for all. Apart from the direct bearing, there was in the Cape Province also the development of the Indigent Boarding House system (vide Supra) which was developed in the first place to accommodate primary pupils and eventually grew into a vast scheme of bringing the children to the villages and towns where both primary and secondary education was available.

(j) Advance in Secondary Education since Union, 1910.

The advent of the Union in 1910, left primary and secondary education in the hands of the Provincial Administrations and development proceeded apace.

The provision made earlier in respect of compulsory attendance and boarding grants now had the effect of increasing the school population by 76% between 1910

1. Std. VI was the end of the Primary School Stage.

and 1921, although the European population of the Province only increased by 11% during this period.

The secondary curriculum was expanded by the inclusion of domestic science for girls and wood-work for boys. The biological sciences were included and Dr. Viljoen, the S.G.E. (1918 - 1929.) strongly propagated the study of agriculture which was introduced into both the Junior and Senior Certificate Courses with a lot of fanfare.

By 1930 there were 16,000 pupils receiving a secondary education in the Cape Province and by 1940 the number had risen to 28,000 in spite of a severe economic depression and a prolonged and disastrous drought over the greater part of the Cape interior.

By 1930, free education was introduced in the Secondary school for pupils up to 15 years of age, thus enabling the bright child to obtain a few years of free secondary education. Although this was a step in the direction of "secondary education for all" it is doubtful whether it had much influence on the extension of secondary education. The position was, that for years prior to 1930, the "bright pupil" who alone could profit by free secondary education up to 15, could always have obtained exemption from school fees on application to the local School Board.

(k) Examinations-Dualism.

The establishment of an external examining body, mentioned earlier, in the initial stages of the development of secondary education has had a dominating influence over the entire system of secondary education,

ever since. The Matriculation examination, controlled by the University of the Cape of Good Hope and afterwards by its successor, the Joint Matriculation Board, was a University entrance examination. For this reason its curriculum was of the classical variety and demanded passes in the official languages, Latin, mathematics, history and a science. (Not all forms of science were recognized for this purpose.) Up to 1910 the Matriculation examination was the only examination to mark the completion of the secondary course; consequently the "Matric" served the dual purpose of securing University entrance and of acting as a Schoolleaving certificate.

In 1910 a School-leaving examination for a Senior Certificate was instituted and in 1923 the Cape Education Dept. introduced its own Senior Certificate examination, thus terminating the direct control of an external examining body over Departmental examinations.

The very considerable indirect control continued, because, to be recognized for University entrance the Departmental Senior Certificate had to satisfy the requirements of the Joint Matriculation Board. The new Certificate, however, offered a measure of differentiation to the extent of allowing the prospective University students to offer a Matriculation exemption course and the prospective school-leavers to include Commercial and other "practical" subjects in their course.

The first purely school-leaving examination, the "School Higher" and its successor, the Junior Certificate, was also controlled and set by the external examining bodies, the University of the Cape of Good Hope

which developed into the University of South Africa. By controlling even this Junior examination which had nothing to do with University entrance, the external examining bodies effectively ensured a uniform standard of education, not only for the Cape Province but for the whole of South Africa.

In 1921 the Province instituted its own Junior Certificate Course, which not only paved the way for its own Senior Certificate (vide supra) but also made possible the inclusion of subjects such as commerce, art, handicrafts, music, agricultural science, e.t.c.. The Joint Matriculation Board continue to exercise considerable influence on the Departmental Junior Certificate for the same reasons described in respect of the Senior Certificate.

For reasons to be advanced at a later stage the writer do not think that the change in the Certificate from a mainly University entrance purpose to a School-leaving purpose was of any consequence in the development of "secondary education for all", excepting, perhaps, that more candidates succeeded in obtaining certificates.

(1) Vocational Education.

Mention have been made of the attempts of the Dutch Reformed Church and the Cape Colonial Education Department to develop vocational education since before the turn of the Century. With Union 1910, the newly constituted Department of Union education took control of Higher Education, an extremely limited function for a Department of State or even for a sub-department. Ever since its inception this Department has been trying

to extend the field of its activities.

In 1911 the Industrial Schools of the Cape, such as were still in existence, were transferred to the Department of Justice. This step was taken because it was becoming customary to commit children, who were in need of care or who had found themselves in some trouble, to these institutions. "This was bad," Pells states⁽¹⁾, "Soon wiser counsels prevailed and the control of industrial education was transferred to the Union Dept. of Education in 1917." This, to my mind was worse. It meant bringing into the body educational a group of schools which had the worst possible stigma, that of criminality, attached to them. Henceforth the public mind would associate vocational schools not only with poverty but also with criminality.

Between the years 1922 to 1924 the Union Education Department took over all vocational education and with it, all the technical colleges in the Union. These institutions increased their enrolment figures tremendously as a result of the Apprenticeship Act of 1922 which made provision for compulsory part-time attendance for apprentices.

The Union Education Department tried to extend vocational facilities by establishing about 30 part-time technical schools all over the country, including such unlikely places as Campbell.

This development must have been well received by the Dutch Reformed Church. In sharp contrast to the Church in England, and to a lesser extent the Church of

1. Op. Cit. p. 81.

England in South Africa, which have always acted as the guardians of the classical traditions of education, the Dutch Reformed Church has always favoured either general education with a strong vocational bias or quite openly pure vocational education. As early as 1894 the Dutch Reformed Church was extolling the virtues of a school-leaving certificate as against the Matriculation Certificate with its classical bias.

P. F. Greyling (Op. Cit. p. 106) voicing the attitude of the church, states " ---- die besef groei dat die onderwys 'n veel breër taak het as bloot kulturele vorming en dat hy ook deel behoort te neem aan die behoorlike toerusting van die volkskind, in aansluiting by die volksaard, vir sy toekomstige lewensroeping. 'n Sterk bewys vir hierdie bewering word o.a. gevind in die feit dat die jongste leerplan wysiging van die Kaapse skole voorsiening maak vir Beroepsvoorligting. Maar ----- dis gedoem tot nutteloosheid indien dit nie gepaard gaan met behoorlike beroepsopleiding nie, waartoe die massa van die volkskinders toegang sal geniet." Here is, what H. C. Dent, the English authority on Secondary education for all, would have called, "vocationalism naked and un-ashamed."

To understand this attitude towards education from the D.R.C. "dominees", who have always maintained an extremely high standard of classical education for their own profession, one must bear in mind the Church's belief in education as an antidote to poverty. In this light must be seen the insistent attempts of the Church to propagate the idea of vocational education or vocationally-biased secondary education.

However, to return to the Union Department part-time technical schools, these proved to be even more of a failure than the D.R.C.'s industrial schools of earlier years, and by 1930 most of them were closed down.

An important development as far as secondary education is concerned, was the interdepartmental agreements between the Union and Cape departments which extended to the Provincial schools the right to include commercial subjects in its secondary courses. This provided the vocational bias so strongly desired by some, although ostensibly, these subjects are introduced for their "general educational value."

The Cape Department's Agricultural High Schools also offer courses with a strong vocational bias and in addition the Province is responsible for the technical education of mentally handicapped pupils.

(m) Holding Power of the Secondary School.

Early in this chapter, mention was made of the fact that when Dr. Muir introduced his system of High Schools, he established a continuous educational ladder with no barrier, which made it possible for a child to progress from the K.G. to the end of the secondary stage in one and the same school. Subsequently some of the problems mitigating against "secondary education for all" such as the problems of poverty and long distances, were discussed together with the measures adopted by church and state to overcome them.

Short of making secondary school attendance compulsory, it would appear that Church and State acting in unison, have created optimum conditions for "secondary education for all." It may also be stated, with-

out fear of contradiction, that there were never in the Cape groups or vested interests, such as the factory owners in Europe, who actively opposed the extension of educational facilities to all children.

One would therefore expect the high and secondary schools of the Cape Province to have attained a high holding-power ensuring at least some secondary education for all its schoolleavers.

The actual facts were quite different, though, and revealed a highly disturbing state of affairs. Pells (Op. Cit. P. 96) states, that by 1936 nearly all European children reached the Std. VI stage i.e. the end of the Primary school. The position as regards secondary education is revealed in Table I. (from Pells, Op. Cit. p. 98.) which gives the percentage distribution of European pupils in Standards VI to X for the years 1931 to 1945.

The figures are read along the diagonal lines eg. it gives the position in 1936 as follows: Out of 100 pupils in Std. VI in 1936, there were 66% in Std. VII the following year, 49% in Std. VIII the next year, 30% in Std. IX the year after and 26% in the Std. X year and not all of these would qualify for the Senior Certificate.

In spite of all the great interest shown in education by church and state, and the devotion to its cause by men of great talent, it is obvious that the dream of "secondary education for all" has failed to materialise.

T A B L E I.

Percentage Distribution of European Pupils in Standards VI to X for the years 1931 - 1945.

Year	Std. VI	Std. VII	Std. VIII	Std. IX	Std. X
1931	100	-	-	-	-
1932	100	54	-	-	-
1933	100	54	39	-	-
1934	100	54	39	23	-
1935	100	59	39	24	20
1936	100	64	45	26	22
1937	100	66	48	27	23
1938	100	66	49	29	24
1939	100	70	50	30	25
1940	100	70	52	30	26
1941	100	70	52	31	26
1942	100	71	51	29	26
1943	100	73	54	31	25
1944	100	77	56	33	26
1945	100	75	56	34	27
1946	100	74	55	34	29
1947	100	75	55	33	28
1948	100	79	56	32	28
1949	100	82	59	33	27

Reproduced from Pells: Op. Cit. p. 98.

In South Africa where an uneducated white proletariat holds the germ of a threat to the survival of the white race itself, such a state of affairs could not be allowed to continue.

The actual position was even worse than the one indicated by the above figures. Some years prior to 1948, the then Secretary of the Union Department of Education, in dealing with the problem of educational retardation in the primary schools of the country as a whole, said: " --- we have for an example in our primary schools in South Africa about 84,000 boys and girls who are 13 years and older and about 48,000 who are 14 years and older, and who are still in the primary school. Over 90 per cent of these children have had more than six years of education, which should have been sufficient to teach them the main tool subjects. Where in other countries these children pass on to secondary education and develop new interests, we still keep grinding away at the rudiments until they are sick of education and lose interest in life ----. Even Std VI, which is regarded as the end of the Primary School, is actually passed by only about 60 out of the 100 who start school. What becomes of the other 40 per cent? They are the people who enter life unequipped for the struggle, and who later on, with their dependents, swell the nation's expenditure on relief and child welfare."⁽¹⁾

Although primary and secondary education were the concern of the provinces, the Secretary had a right to be perturbed because the situation outlined

1. De Villiers Report para. 270.

by him, ~~was~~ not only effecting the secondary education of the Provinces but also the vocational education of his own Department. The Second World War has pushed South Africa right into the technological age. The geographical position of the country favoured the development of war industries and a period of huge industrial expansion was entered immediately after the war when streams of "escape capital" started to flow into the country.

Industrial development require skilled workmen and technologists and these were not forth-coming from the nation's schools. In ^{the} a view of the Secretary for Education, thousands of them were languishing in the provincial primary schools while the wheels of industry were grinding to a standstill on account of lack of skilled labour.

This brings us to the appointment of the Commission mentioned in the Introduction to this study and in the introduction to this chapter, a Commission whose findings were destined to provide the main fare at educational discussions in South Africa ever since.

3. REPORT OF THE COMMISSION ON TECHNICAL AND VOCATIONAL EDUCATION, 1948.

(a) Composition.

This Commission which is better remembered as the de Villiers Commission after its Chairman, Dr. F. J. de Villiers, was appointed by the Union Government in 1945. The other members were L. H. Badham,

C. H. Crompton, Professor John Orr and A. Sinton.

Its Report U.G.65 was published in 1948.

(b) Terms of Reference.

In its own words the Commission

" --- has conceived its task as covering, from a certain point of view, the whole field of education, general and vocational." (Report para. 9)

It goes on to stress "the interdependence of general and other education and that technical and vocational training cannot be efficient and meet the modern-day demand of industry, commerce and agriculture without a sound foundation of primary and general secondary education." (Report para. 10.)

With this wide, almost limitless view of the scope of its investigation the Commission interpreted its task as

"(a) a general survey, together with a critical review, of the present structure of general as well as technical and vocational education;

(b) the formulation of the objectives, scope and function of the respective educational fields; and

(c) a study of modern tendencies and needs in education generally, and the changes in the present system which these demand, aiming at closer correlation between general and vocational education and greater efficiency in both fields." (Report para. 11.)

Two more observations of the Commission in respect of its own interpretation of its task were (i) that it confined itself to the "normal child" (Report para. 13.) and (ii) that "its task was mainly concerned with the education and training of the adolescent" (Report. para. 14.)

For the purpose of the present study it is not considered necessary to examine all the findings and recommendations of the Commission but only those that

have a bearing on the extension of the idea of "secondary education for all" particularly in respect of divergent ability groups.

(c) General and Vocational Education:

It must be borne in mind that the Commission was not in the first place appointed to extend secondary education but to extend vocational education. That the Commission's recommendations would bring about the ideal of secondary education for all was only in a way essential to the main object of promoting the vocational ideal of education. Table I (vide supra p. 30), although indicating a very unsatisfactory state of affairs, it also indicates that the numbers proceeding from the primary to the secondary stage, were increasing. The Commission must have had figures like those in mind when it referred (Report para. 119) to " ---- the phenomenal growth of secondary education under the provinces" and when it rather plaintively complained that " --- the primary schools have till now been considered as feeder schools for the provincial high schools" (Report para 119) and when it stated " ---- that in order to facilitate the automatic movement of pupils from the primary schools to the provincial post-primary schools, there had been a growing tendency to attach Std VI Classes to the post-primary schools instead of to the primary schools where they have in the past belonged" (Report para. 118) and then the most revealing opening sentence of Paragraph 120 of the Report: "The Commission by no means wants to

suggest that this rapid expansion of secondary education under the provinces is of necessity undesirable."

In considering the relationship between general and vocational education, the Commission avoided involved argument by accepting (Report para. 107,108) an entirely negative definition of general education on the one hand and an all-embracing definition of vocational education on the other; a definition so wide that it claims a purely academic course at school as vocational because it leads to a University course which leads to one of the learned professions.

With this concept of vocational education the Commission is in good company. In the introduction to the Spens Report⁽¹⁾ Dr. R. F. Young stated " --- in reality much of the education described as 'liberal' or 'general' was itself vocational education for the 'liberal' professions."

Many years earlier the Royal Commission on Secondary Education of 1894 - 95 (the Bryce Commission) in Britain stated⁽²⁾ in respect of secondary and technical education:

"The two are not indeed identical, but they differ as genus and species, or as general term and particular name, not as genus and genus or as opposed terms. No definition of technical instruction is possible that does not bring it under the head of Secondary Education, nor can Secondary Education be so defined as absolutely to exclude from it the idea of technical instruction -----"

1. H. C. Dent: Secondary Education for All p.37. Quoting from "Secondary Education" with special reference to grammar schools and technical high schools, 1939. (The Spens Report)

2. According to H. C. Dent's abridged version (Op. Cit. p. 32.)

Technical instruction is secondary i.e. it comes after the education which has awakened the mind by teaching the child the rudiments, or, as it were, the alphabet of all knowledge ----- And secondary instruction is technical i.e. it teaches the boy so to apply the principles he is learning, and so to learn the principles by applying them, or so to use the instruments he is being made to know, as to perform or produce something, interpret a literature or a science, make a picture or a book, practice a plastic or a manual art, convince a jury or persuade a senate, translate or annotate an author, dye wool, weave cloth, design or construct a machine, navigate a ship or command an army."

It is historical knowledge today how, thanks to the Robert Mordant supporters of the grammar-school tradition, this definition was ~~com~~pletely ignored by the English Education Act of 1902 which had to give effect to the recommendations of the Bryce commission. Similarly it is unlikely that any definition, based on the indivisibility of secondary and vocational education, however brilliant, could have inaugurated a system of vocational education under the Union Education Dept. equal in popularity to the secondary education of the provincial education departments.

The de Villiers Commission was too well aware of the stigmas attaching, rightly or wrongly, to the vocational institutions of the Union Education Department to hope that the mere publication of a broad definition would result in streams of primary school-leavers being diverted to these institutions. The Commission was also aware of the fact that for the majority of the secondary school population (Report para. 121) the secondary school course was preparation, however inadequate, for a career.

In this connection the particular popularity of "white-collar jobs" for which Junior Certificate or

Senior Certificate courses were, in effect, vocational training, has always been a feature of the South African labour scene. In South Africa "white-collar jobs" have traditionally been "white mens' jobs" long before anyone had heard of "job reservation."

There existed traditionally and also as previously indicated, according to the educational concepts of the Dutch Reformed Church, a dominant vocational aim in education but for the vast majority of European parents this aim could be better realised in the provincial secondary schools than in the Union's vocational schools! Any direct attempt at popularising the latter institutions would have failed and a direct onslaught on "general" education would have roused the ire of the provincial educationists.

In its approach to this problem the Commission displayed brilliant strategy; (i) it concluded that vocational education is a phase (Report para. 111 and 115) of education which must follow on a period of fulltime general education and (ii) it actually accused the provincial secondary schools of not being able to provide a broad general education (Report para. 125 and 126) and especially of not providing in the general educational needs of the adolescent (para. 127) and (iii) it promptly turned to the task of devising a national scheme of education

"---- in which the interests and possibilities appearing in each phase of adolescence would be suitably encouraged, so that youth could be expected to arrive at adulthood with all their potentialities reasonably well developed, and with a physical, social and cultural experience which would be very useful to them in adult life."

The de Villiers Commission must surely be the

only educational commission ever appointed to further the interests of vocational education which approached its task by evolving a new "liberal" system of general education. But in the writer's opinion, the Commission never, for one moment, lost sight of the practical vocational aims; aims which become more obvious as the scheme unfolds.

(d) The Proposed National Scheme of Education:

The proposed organisation:

The Commission recommended the following organisation. (Report para. 228):

Age of Pupils.	Full-time Education	Part-time Education
About 3 to 6	Nursery School	-
5 plus to 12 plus	Primary School	-
12 plus to 15 plus	Junior High School	-
15(a) plus to 17 or 18 plus	Senior High School	Compulsory Cont. Classes
15(a) plus to 17 plus	Vocational High School	Compulsory Cont. Classes and Parttime apprenticeship courses.
15(a) plus	Technical College with High School Dept.	As for vocational schools plus more advanced courses.
17 plus	Agricultural College	Short Courses
18 plus	University and Teacher's Training College	Vocation session and extra mural classes

THE NURSERY SCHOOL:

The Commission considers pre-school education to be the responsibility of the State (Report para. 244) which should provide the necessary facilities for the 3 - 6 year olds "whose home education is defective." Even in this recommendation the Commission had its eyes on the future occupational efficiency of the pre-school child and is consequently interested in the preventive measures in regard to the mental and physical health of the "lower" schools.

THE PRIMARY SCHOOL:

(i) The primary school course would provide for pupils from Sub Std. A. to std. V i.e. a seven years course.

(ii) Primary education is considered a stage in an educative process and the Primary school remains responsible for the training in the basic skills and habits. The Commission expressed themselves against the view that reading, writing and arithmetic are the fundamentals of education and found themselves in agreement with the Scottish Advisory Council in considering that physical education, handwork and speech are the fundamental subjects in the primary school. ⁽¹⁾

1. Handwork, in the sense used by the Scottish Council include the use of " --- one other tool, and one of the simplest ---- the small stick used for the art of writing which may be formed into a pencil or a pen --- a tool of supreme importance in the development of mankind --." (The Scottish Advisory Council's Report on Primary Education. p. 22 -23).

(iii) By terminating the primary course at the end of Std. V the Commission not only eliminated a school-leaving certificate (Std. VI) but hoped to eliminate all forms of competitive examination in the primary school.

(iv) The Commission hoped to eliminate the high incidence of retardation in the traditional primary school (40% in 1946, Report para. 267, 268) by accepting the principle of automatic or age promotion in the primary school i.e. both in the movement from one group to the other (groups to take the place of standards) and automatic promotion from the primary to the Junior Secondary School at the age of 12 plus.

THE JUNIOR HIGH SCHOOL:

To this, the Commission's own innovation and the corner stone of its educational edifice, a full chapter is devoted in the Report. For the purpose of this study it will only be necessary to discuss the relevant factors briefly because no Junior High Schools, as envisaged by the Commission, were established in the Cape Province.

The main principle enunciated was designed to bring about revolutionary changes in the existing secondary school system.

(i) Universal Secondary Education:

All pupils who leave the primary school will attend the Junior High School. This transfer will take place automatically when the child had attained the age of

12 plus. (Report para. 323, 324.)

(ii) General education for the junior adolescent:

The Junior High School will provide for a three years course of post-primary, full-time general education. Accordingly it is in the first place the school for the junior adolescents, the pupils in the age group 12 plus to 15 plus.

In providing for the needs of this group it should be "uncompromisingly" child-centred in that it will provide in the present needs of its pupils; it would provide for systematic vocational guidance; it would also provide for exploratory or try-out activities. In this connection and for future reference in this study para. 333 must be quoted in full:

"The junior adolescent normally has an intense craving for personal achievement, especially along lines highly regarded by his associates. The new junior high school provision of exploratory activities could be bent also on meeting this need, on finding for each pupil something he can do well - something in which he can experience successful achievement. It should not matter what this something is, whether it is a skill or set of skills acquired inside or outside the school. What does matter is that each junior adolescent should be led to such experiences which will help him to discover that 'he has a self and that is a self which he can respect.'"

(iii) Heterogenous Junior High School population:

The Commission used the following table to illustrate the heterogenous nature of the population one would expect to find in the junior high school during the transition period. The table, compiled according to statistics provided by the National Bureau of Educational and Social Research, present the age distri-

bution of junior adolescents in the country's educational institutions in 1946. (Report para. 345)

TABLE II.

Age Group.	Number of Pupils in Different School Standards.								
	Std. II and lower	Std. III	Std. IV	Std. V	Std. VI	Std. VII	Std. VIII	Std. IX	Std. X
12 yr. olds	986	4384	11,288	14,417	6384	545	9	-	-
13 yr. olds	197	1,229	4,706	10,644	13,372	5,926	539	14	-
14 yr. olds	69	310	1,572	5,155	10,381	11,678	5,318	476	13
	1,252	5,923	17,566	30,216	30,137	18,149	5,866	490	13

"The new junior high school's biggest problem will thus be provision for individual differences" (Report para 346) ⁽¹⁾ The Commission pointed out, however, that pupils of various ability have always been thrown together in the farm schools and that those teachers had to deal with children from 6 to 16 years spread over eight primary standards.

It is obvious (Report para. 347 - 351) that the Commission held out little hope that organisational arrangements from outside could solve the problem of adequate differentiation for the various groups and that "educational administrators will --- have to exploit other ways in which the efficient teacher makes provision for individual differences."

One way of providing the necessary differentiation

1. Emergence of our problem!!

would be by adopting the system of pupil grouping.

"The Junior high school should not have school standards as they are known in our present school system. In place of the present standard VI, VII and VIII classes, a junior high school should divide its pupils into as many groups as its staff can manage effectively." (Report para. 416)

If this was not sufficiently revolutionary, the next paragraph was designed to knock out for six the whole traditional system of secondary education! The Commission declared (Report para. 417)

"For each field of study the pupils should be grouped separately. For English, Afrikaans and arithmetic-elementary mathematics instruction, ability groups should be formed, that is, groups based on the standard of achievement of the pupils in the subject concerned."

In the discussion of the proposed curriculum the Commission stated in the same vein: (Report, para. 362)

"Such expressions as 'Standard VI arithmetic' or 'Standard VIII science' will become anachronisms in the new junior high school. At any particular stage of their junior high school career any particular group of pupils will be receiving the instruction, in for instance, arithmetic and science which will constitute their next step in the mastery of the skills ----- which they require -----."

Differentiation must be carried to a point where it will ensure the healthy adjustment of every single

pupil. A pupil who, on leaving the primary school, has reached "the end of his tether" in arithmetic-mathematics should be allowed, on the advice of a guidance worker, to drop the subject completely and probably spend more time on other subjects.

Through the guidance service with its system of pupils records, objective tests and counselling techniques the personal, vocational and scholastic problems of every individual pupil in the heterogenous school population will become the concern of the school.

(iv) Pre-vocational training and the Junior High School:

It has been stated repeatedly in the Report that the main function of the junior high school is to provide full-time general education for all junior adolescents. "They will not classify their pupils into occupational groups, however broad, such as commercial, technical, academical, agricultural."

The Commission realised however that the junior high school will be failing in its ideal of providing for individual differences if it does not take account of the fact that some pupils will leave the junior high school to enter directly into employment. These pupils will leave school at 16 without any further training at a senior or vocational high school which constitute the next step on the Commission educational ladder. These pupils " --- will be mostly those of lower intelligence who will have to enter occupations for which no special training is required."

In the junior high school these pupils will form

one of the ability groups. In providing for their special needs, practical arts, for instance would tend to become a matter of acquiring "saleable skills ----- such as carpentry, metalwork, housepainting etc. which will make them occupationally as useful as possible."

The vocational interest, especially of those lower intelligence groups, will therefore be just as important in framing their school activities as any other interests the group may have. A group of boys interested in farming should have most of their activities in the major field of studies directed by this interest.

"Their general science will to a large extent tend to become agricultural science. Their social studies will tend to be a study of 'the farmer in a changing world.' Their practical arts will make ample provision for such field activities as school gardening and practical agriculture." (Report para. 481)⁽¹⁾

(v) Curriculum for the Junior High School.

The curriculum should consist of the following compulsory⁽²⁾ "subjects". English, Afrikaans, Arithmetic and Elementary Mathematics; General Science; Social studies; Practical Arts; Music and Art Appreciation; Physical Education; Religious Instruction; Singing.

1. These considerations indicate the Commissions attitude towards the education of the child with lower than average mental ability.

2. Pupils who have reached their absolute maximum level in specific subjects would be exempted from this Compulsion clause.

These subjects will be considered as broad fields of study and syllabuses would be replaced by "guides to teaching". These manuals would be compiled by a National Junior High School Curriculum Committee representing educational opinion throughout the Union.

At this stage the Commission's opinion and recommendation in regard to the subjects of the curriculum is not essential to the development of our theme. Relevant factors in this connection will be referred to whenever necessary.⁽¹⁾

4. CONCLUSION.

From the preceding review of the development of the democratic concept of secondary education for all, it is possible to extract the following salient features peculiar to this development in the Cape:

(a) Ecclesiastical control and religious aims marked the early development of education at the Cape.

(b) The Dutch Reformed Church which practically directed the development of education in the Cape ever after the control has become secular, never acted as guardian of the classical tradition of education as was the case with the church in England and on the Continent.

1. For reasons which will be obvious in the development of the study, the Commission's findings and recommendations in respect of the rest of its system i.e. the two types of High Schools, etc. are not discussed at this stage.

(c) The Church's concept of education as an antidote to poverty introduced strong vocational aims in education in the Cape.

(d) The vocational aims extolled by the Church failed to popularise education based on manual vocations on account of (i) the stigmas of poverty and criminality attaching to these institutions and (ii) the fear of the European that manual work would put him on a level with the Native or Coloured artisan.

(e) The vocational aims were centred instead on Secondary education because its certificates, the Junior and Senior Certificate, gave admission to a host of clerical jobs; also, ^{to} those offered by the two largest employers of labour in the State, the Civil Service and the South African Railways and Harbours.

(f) Secondary education has always had the dual function of preparing pupils for the examination for the schoolleaving certificate mentioned above and also for the Matriculation exemption certificate which is still required for admission to South-African Universities.

(g) Excepting for the preparation of a small number of its population for admission to University the secondary school in the Cape has no tradition of classical education equivalent to that in Britain.

(h) The formation of high schools with an un-

broken range of standards from Sub. Std. A to Std. X established an educational ladder with no barriers and a high measure of articulation between primary and secondary departments.

When we say that there were no barriers between primary and secondary education it is in comparison with the growth of secondary education in England where, for the best part of a century, the elementary schools tried by way of "upthrusts" into the secondary era to open this type of education to the underprivileged child while the vested interests of the Church and wealthy industrialists tried equally hard to keep them down.

This "social" or "class" barrier between primary and secondary education never existed in the Cape.

(i) Physical factors of distance mitigating against the provision of secondary facilities for all were eliminated by (i) the building of irrigation schemes resulting in the concentration of large numbers of families making it easier to provide school accommodation; (ii) The establishment of boarding institutions by church and state and (iii) the provision of boarding bursaries and travel grants.

(j) Compulsory education was introduced in the Cape by the Act of 1905. It developed step by step until 1919 when education was made compulsory for all European children between the age of 7 and 16, who have not yet passed Standard VI. This should have had the effect of bringing about secondary education

for all, at least for a year or two but, as pointed out earlier, this dream did not materialise.

What features of the education system then were discriminating against the realisation of the ideal?

(k) Retardation in the primary school. This feature was emphasised very strongly by the de Villiers Commission and is clearly indicated by Table II. By failing repeatedly, pupils remained in the primary school till they turned 16 and then left school.

(l) The Std. VI-fetish. This was, in its effect on the healthy development of secondary education for all, a more serious problem than the "Matriculation-fetish." A schoolleaving examination at the end of the primary school stage, it provided a certificate which was accepted for entry to the trades, the mines, the post-office, the South African Police, the South African Permanent Defence Force, etc.. This means that for many pupils even the primary school had a vocational aim - the provision of a certificate acceptable to employers.⁽¹⁾

There can be no doubt that the retardation of pupils in the primary school and the existence of a Std. VI schoolleaving certificate were the two factors responsible for delaying the ideal of "secondary education for all" in the Province. Both of these fac-

1. The writer once overheard a father telling a friend that his son who was in Std. IV was studying to become a policeman.

tors were glaringly exposed in the findings of the de Villiers Commission and ruthlessly eliminated in the educational scheme proposed by the Commission.

CHAPTER II.

THE RIGHT KIND
OF SECONDARY EDUCATION
FOR EACH.

1. INTRODUCTION:

"He, therefore, that is about children should well study their Natures and Aptitudes, and see by other Trials what Turn they easily take and what becomes them; observe what their native Stock is, how it may be improv'd, and what it is fit for; He should consider what they want, whether they be capable of having it wrought unto them by Industry, and incorporated there by Practice ---- Everyone's natural Genius should be carry'd as far as it could; but to attempt the putting another upon him, will be but Labour in vain."

These words of John Locke, taken from his "Thoughts on Education"⁽¹⁾ is as true today as it was in 1693 with the difference that today an abundance of scientific data and methods are available to prove the truth of this 17th century observation on individual differences.

The awareness of educationists and educational administrators of the truth of Locke's statement is responsible for the fact that in the development of secondary education the last word is not "secondary education for all" but "the right kind of secondary education for each." Pushing all children through

1. Pitt Press Edition, p. 66.

a certain number of years in a secondary school could easily be accomplished by legislation. To provide each individual pupil with education based on "what Turn they easily take" and on "what becomes them" and on "whether they be capable of having it wrought unto them" and to take cognisance of every one's "natural Genius" and to beware of "putting another upon him" present the main problems that stem from "secondary education for all" and which make it incumbent upon the modern state to provide for "the right kind of education for each".

In the present study Section A is devoted to the tracing of the origin of our problem. In the preceding chapter this theme was developed to the stage where a national education commission had recommended, not only secondary education for all but had also indicated how provision should be made for the right kind of secondary education for each and it is from the implementation of this recommendation that our problem, the secondary education of the dull-normal child, originates.

Inherent in the phrase "the right kind of secondary education for each" there are two concepts; the concept of a type of education and the concept of divergent types of children. In order to achieve the object of this study as outlined in the Introduction i.e. to determine the measure of success achieved by the Junior Secondary Course in respect of the dull-normal child, these two concepts in their practical application will be discussed in this chapter.

Firstly the "type of education", in this case the Junior Secondary Course, will be examined as far

as its introduction, aims, functions and organisation are concerned particularly as far as these aspects concern the dull-normal child. This part of the study is necessary because no evaluation of a system can be undertaken before it is known quite clearly what the system has set out to achieve.

Secondly, to evaluate the success of the course for a particular group or type it is necessary that this group should be identified. Not only should the group be identified but the general and the particular needs of the group should be recognized and described. For the purpose of this study it will mean the identification of the dull-normal child and the description of his needs; his needs as a child with below average general intellectual ability as well as his needs as an adolescent.

2. THE JUNIOR SECONDARY COURSE:

(a) Implementation of some Recommendations of the de Villiers Report:

Although described as the outstanding educational event of the post-war years and as an epoch-making document no machinery existed for the full implementation of the recommendations, of the de Villiers Report. Even the Union Government who appointed the Commission, had no power to put its recommendations into effect on account of the absolute autonomy of the Provinces over primary and secondary education.

The different education departments studied the report and each made such use of its findings and

recommendations as it considered to be in the interest of its own province.⁽¹⁾

(i) In the Cape a new primary course of 7 years duration ending at Standard V ~~was~~ introduced in 1950.

(ii) In preparation for universal secondary education, compulsory education ~~was~~ extended to Std. VII or 16 years of age as from the beginning of 1951 and from the beginning of 1952 education became compulsory to Standard VIII or 16 years of age.

(iii) The Junior High School plan was not accepted by the Cape but in its place was introduced the Junior Secondary Course of which Pells⁽²⁾ says "The form and nature of this general secondary education was inspired in part by certain of the recommendations of the Report of the Commission on Technical and Vocational Education of 1948."

(b) Introducing the Junior Secondary Course.

The course, which made provision for three years of secondary education, was introduced piece-meal from the beginning of 1953. In that year only Std. VI *pupils* started on the new course while those pupils in Std.

1. If the provinces could not be compelled to adopt the recommendations of the de Villiers Report it is equally certain that the provinces could not afford to ignore all the principles enunciated in the Report; principles which in various forms, have been accepted and were influencing education throughout the civilised world.

2. Op. Cit. p. 95.

VII and VIII continued with the old Junior Certificate Course. In some cases where it was found impossible to accommodate the Std. VI classes at high or secondary schools, they were retained at the primary schools for another year but they were to follow the new Course for Std. VI.

In 1954, Stds. VI and VII were to follow the new course while Std. VIII continued with the old Junior Certificate course and in 1955 and after, Stds. VI, VII and VIII were to follow the new junior secondary course.

(c) Aims of the Junior Secondary Course:

Since the course was designed to be continuous with the primary school course, "the educational principles set out in the introduction to the course for primary schools ----- hold good for the education envisaged in this course for the junior secondary school."⁽¹⁾

The principles and aims outlined for the primary course are:

(i) The school must contribute to the development of desirable attitudes in the child.

(ii) In happy societies the recognition and appreciation of the individual and conversely the

1. E 321. Junior Secondary Course. p. 2.

individual's realization of his obligations to the society and his consciousness of his dependence on God is essential. The development of the individuality of the child in such a way that the individuality also aim at the welfare of the community is therefore of the utmost importance in the education of the child. Education should also develop a spirit of grateful submission to the Almighty.

(iii) Through teaching and through providing opportunities of dealing with actual situations the child should learn to plan, to appreciate the consequences of his own actions, to perform tasks, to examine methods of work critically, to develop respect for his fellow men, etc.

(iv) Each subject must make its contribution to the complete growth and development of the child.

(v) Certain subjects such as religious studies together with the entire school life of the child in all its aspects should aim at character building and at moral development.

These general aims may be said to have been the universal general aims of education through the ages and throughout the civilized world.

Whether the planners of the new junior secondary course considered the course to be so highly articulated with the primary course that even the specific aims of the primary course i.e. the acquisition of

basic skills should apply to the secondary course as well, is not clear. Great emphasis is laid upon the continuation aspect which should present a "smooth curve, and not a broken line." In the "Introduction to the Course" secondary education is defined in terms of a stage; "a further stage in the complete education of the child." It does not tell us clearly in terms of aims what secondary education is but instead describe the function of the secondary school as "----- to continue building upon the broad foundation which was laid in the primary school and to provide further education of a general nature." No attempt is made to define "general nature" in this context. Must it be regarded as a term opposed to "vocational education" or is it an indication that the aims of the new course itself were too obscure to frame more specific aims?

"Educational aims should be definitely and functionally stated. Vague generalizations are of little value" says Bent and Kronenberg.⁽¹⁾

Beyond those mentioned above, the Introduction to the Course is not particularly voluble in setting forth aims, either general or specific. As if in compensation the introduction to the syllabus of each subject gives the aims, specific and general, of that particular subject. However, the following functions

1. Principles of Secondary Education. p 35.

which are of importance for this study, are described in the Introduction.

(i) Use of knowledge.

Pupils should be guided to co-ordinate and apply their new-found knowledge to life situations. The pupil must be guided to appreciate this knowledge because he can use it to his advantage in his daily life and in the extension of his studies. The practical value and use of all his subjects should be emphasised.

(ii) Adolescence.

On account of the nature and organisation of the new primary course, it was expected that pupils will transfer to the secondary course at 12 or 13 and will remain there until the age of 15 or 16. "This school will therefore be the school for the junior adolescent and will have to meet the educational needs of children of this age."

In more than one way this was an erroneous assumption. In the first place the use of the word "school" when "course" is intended is not conducive to clarity of concepts especially where one is dealing with a new system. This group i.e. the 12 to 15 year olds, would attend a course of 3 years duration in a high school which would also offer a two years course for the Senior Certificate

which will be attended by adolescents of 16 to 18 years. More often than not, in the rural areas, this high school would also have a primary department and even an infant-school section which means that the age distribution of its population would range from 6 to 18 or 19 years.

The introduction of the junior secondary course did not therefore, in this respect, implement the de Villiers report which envisaged separate schools for this group. At the most one could expect a concentration of the age groups 12 to 15 in Std. VI, VII and VIII but outside the classrooms in the corridors, wash-rooms and on the playgrounds of their high schools this group would find themselves very much the juniors of the senior adolescents of Stds. IX and X.

In another respect too, the assumption of a homogenous group in the junior secondary course as far as adolescence is concerned, is erroneous. In this respect the de Villiers Commission as well as the early originators of the American Junior High School, were ~~equally~~ at fault. It was proved that the American Junior High School does not constitute a homogenous group but one with wide differences in respect of stages of pubescence.⁽¹⁾

It is true that between the ages of 12 and 16 the greater percentage have reached the same stage but there will still be three groups i.e. pre-pube-

1. Bent and Kronenberg: Principles of Secondary Education p. 119.

scent, pubescent and post-pubescent.

Luella Cole⁽¹⁾ found the following degrees of variation for every 100 thirteen-year-old pupils:

70 girls will be physically mature;

30 girls will be immature.

15 boys will be physically mature;

85 boys will be immature.

These findings indicate that in mixed schools the degree of heterogeneity will be even more marked in the 12 - 15 years group on account of the different rates of maturation between boys and girls. Different authorities have given divergent age boundaries for adolescence. Brooks⁽²⁾ gives the period 12/13 to 20, Landis⁽³⁾ gives the terminal age as 23/24, Waterink⁽⁴⁾ 12 to 18 and Lester and Alice Crow⁽⁵⁾ 13 to 19. It is known that, amongst other, climatic conditions and factors of race will also influence the onset of pubescence in boys and girls.

However, due to the age retardation one expects to find in the case of dull-normal pupils, one also expects this group to have a higher average chronological age and in consequence a larger measure of adolescent homogeneity. With groups of 100 fifteen-year-olds Luella Cole found:⁽⁶⁾

95 girls will be physically mature;

5 girls will be physically immature.

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1. Luella Cole: Psychology of Adolescence, p. 55 - 56.
 2. Brooks: Psychology of Adolescence p. 1.
 3. Landis: Adolescence and Youth.
 4. Puberteit, p 56
 5. Adolescent Development and Adjustment.
 6. Op. Cit. p 55 - 56.

85 boys will be physically mature;

15 boys will be physically immature.

This means that we may find our dull-normal group a more homogenous adolescent group than the total junior secondary population would represent and consequently the function of the course i.e. "----- to meet the educational needs of children of this age" must be expected to be exercised in respect of the dull-normal group.

Again the "Introduction to the course" is rather vague in enumerating the needs of the adolescent and in indicating the methods by which these needs should be met. Some of the difficulties experienced during early adolescence, such as selfconsciousness, lack of concentration, instability and resentment against discipline are enumerated and then comes this peculiar sentence: "Serious mistakes in teaching and discipline may produce a harmful sense of frustration and failure." The nature of the "serious mistakes" is not even hinted at and no indication is given of how the expected calamity may be averted.

"The young adolescent must learn to find and control himself. He must learn to cultivate pleasant manners and good habits, to accept responsibility, and to work and live with other people. He must prepare himself courageously to face the conflicts of life."

All this is so delightfully vague as far as aims and needs and methods are concerned that in the second half of this chapter it will be necessary to give more attention to the needs of the adolescent in order to

provide a basis for evaluating the success of the junior secondary course in this respect.

(iii) Individual differences.

For our purpose this is the most important part of the "Introduction to the course" and for that reason it is quoted in full:

"Since the schoolleaving age has been raised and the transfer of pupils from the primary to the secondary school is to be determined by age as well as by attainment, differences between individual pupils who enter the secondary school will be greater than in the past. It is therefore essential that the special abilities and intellectual capacities of each pupil should be discovered as early as possible and his education so planned that the time he spends at school may be as profitable as possible; the more so since a large number of children will spend the final year of their school lives in the junior secondary school."

For clarity of concept in regard to divergent abilities, as understood by the architects of the course, it is necessary to read this paragraph in conjunction with the concluding paragraph of the section on features of the course (E321. p. 4):

"The course must be considered as a means to the provision of educational opportunities which will meet the special needs of each pupil. Each child has his own potentialities, whether his I.Q. be 130 or 80, and whether he be gifted with his hands or have academic abilities."

The concluding paragraph of the general remarks on page 6 (E321) must also be kept in mind in this connection:

"Separate provision has been made for pupils with I.Q. of \leq 80, and special syllabuses have been drawn up." (1)

The only inference one can draw from these quotations is that the individual differences which the framers of the course had in mind were, in the main, differences of general intellectual ability.

The emphasis on "intellectual capacities" and the fact that actual I.Q.'s are mentioned to indicate range of ability, produce adequate proof that, in this respect, the framers of the course accepted the concepts and findings of modern psychology.

This cannot be claimed for all educational committees and it may be interesting to divert for a moment from our main theme in order to glance at other ~~concepts~~ concepts of individual differences.

The Spens Report (page 377)⁽²⁾ on the organisation and interrelation of schools which provide education for pupils beyond the age of 11 plus in England advocated three types of schools i.e. Grammar Schools, Technical High Schools and Modern Schools and thus launched the tripartite organisation of secondary education in England.

The Norwood Committee not only supported the

1. Pupils with I.Q. of less than 80 would in most cases not reach the secondary school because during their primary school careers, the majority should be diverted to Special Classes for Mentally retarded pupils.

2. "Secondary Education, with special reference to Grammar Schools and Technical High School 1939."

tripartite organisation of the Spens Committee but went further and discovered three types of minds to fit the three types of schools. Declaring that " ---- we have no sympathy with a theory of education which pre-supposes that its aim can be dictated by the provisional findings of special sciences, whether biological, psychological or sociological" they found that " ----- the evolution of education has in fact thrown up certain groups which have established themselves in general education practice."⁽¹⁾ H. C. Dent considers that the Committee would have been nearer the truth had they substituted "accidents of history" or better still "errors" for "evolution"⁽²⁾ while David W. Oates⁽³⁾ considers that the idea of three types was developed as "a practical administrative convenience rather than as a result of the examination of the evidence of the psychology of child development."

The Norwood Report describes the three types as follows:⁽⁴⁾

(a) The Grammar School type who is "interested in learning for its own sake,"⁽⁵⁾

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1. Norwood Report p. 2.
 2. H. C. Dent. Op. Cit. p. 138.
 3. The New Secondary Schools and the Selection of their pupils p. 10.
 4. Norwood Report p. 14.
 5. At 11 years of age?

--- who can grasp an argument or follow a piece of connected reasoning, who is interested in causes ----- who is sensitive to language as an expression of thought --
 --- interested in the relatedness of related things, in development, in structure in a coherent body of knowledge. He can take a long view and hold his mind in suspense --- He may be good with his hands or he may not; he may or may not be a good 'mixer' or a leader or a prominent figure in activities, athletic or other."

(b) The Technical School type

" ----- whose interests and abilities lie markedly in the field of applied science or applied art ---- has a strong interest in this direction and often the necessary qualities of mind to carry his interest through to make it his life-work at whatever level of achievement. He often has an uncanny insight into the intricacies of mechanisms where-as the subtleties of language construction are too delicate for him. ----- He may have unusual or moderate intelligence ----- He may or may not be good at games or other activities."

(c) The Modern School type who

" ----- deals more easily with concrete things than with ideas. He may have much ability, but it will be in the realm of facts. He is interested in things as they are; he finds little attraction in the past or in the slow entanglement of causes or movements. ----- He often fails to relate his knowledge or skill to other branches of activity. His horizon is near and within a limited area his movement is generally slow ----- . Again he may or may not be good with his hands or sensitive to Music and Art."

The Norwood Committee evinced no concern for their flagrant disregard of the findings of the "special sciences" and asserts in respect of the three types:⁽¹⁾

"Whether such groupings are distinct on strictly psychological grounds, whether they represent types of mind, whether the differences are differences in mind or degree, these are questions which it is not necessary to pursue."

1. Norwood Report p. 2.

It is difficult to recognize clearly the difference between the "Grammar School type" who can "follow a piece of connected reasoning" and the "Technical School type" who is interested in applied science and who can make of his interest his life-work at whatever level of achievement. It is also difficult, as pointed out by the London County Council Education Committee⁽¹⁾ " ---- to see how the technical school pupil, described as one who is interested in the application of knowledge to 'the control of material things' differs from the modern school pupil, who is described as 'dealing more easily with concrete things than with ideas.'

Small wonder that H. C. Dent can state that "authoritative psychological opinion in this country has unanimously rejected the Norwood types of mind."

For our present purpose it is not necessary to pursue the controversies initiated in England by the Norwood types. In any event, no organisation based on these types could be contemplated for the Cape Province on account of the vertical division of education between the Provincial and the Union Education Departments; any group or type or school using the epithet "technical" would immediately be pounced upon by the Union Education Dept. and removed from the body educational of the Province.

Could it be that the new junior secondary courses acceptance of modern psychology's tenets of individual differences expressed in terms of general ability was

1. Memorandum published in their agenda of December, 1943 quoted by H. C. Dent Op. Cit. p 141.

due more to existing factors of educational control rather than to a predilection for the findings of modern psychology?

The writer feels justified in putting this question on account of the complete absence of any attempt at defining ability groups excepting for the group with I.Q. less than 80 and these should have been diverted to Special Classes in any case, before reaching the secondary school. For the rest it is recognized that the needs of each individual child must be met "whether his I.Q. be 130 or 80 and whether he be gifted with his hands or have academic abilities."⁽¹⁾

No groupings are made according to either general or special abilities and consequently the emphasis falls on the individual pupil. The task of the school in this connection becomes the superhuman task of the early discovery of each child's special abilities and intellectual capacities and the planning of his education so that " ---- the time he spends at school may be as profitable as possible."

No indication is given of the methods to be followed to achieve this aim. The aim itself is so vague as to be meaningless; it would be monstrous if the time spent at school were not used as "profitable as possible," but what is considered "profitable" will almost certainly differ from or educa-

1. This last differentiation seems to correspond with the two types of the Hadow Report " -- that of the grammar school type, and that of the type of the modern school" (The Education of the Adolescent. Intro. pp. XXI and XXII); the differentiation with which Dent agrees " --- there are fundamentally only two main types of secondary education - the academic and the non-academic." (H. C. Dent Op. Cit. p. 63.)

tionist to the next. The de Villiers Commission, discussing the lower intelligence group (vide supra p. 44, 45) in the Junior Secondary School, declare that

"---- in providing for their special needs, practical arts for instance would tend to become a matter of acquiring sale-able skills ----- such as carpentry, metalwork, house-painting, etc. which will make them occupationally as useful as possible."

This would be the de Villiers Commission's interpretation of profitable. The parent who regard the secondary school as the vocational training institution for "white collar jobs" (vide supra p. 47) would consider his son's time profitably spent only if it would lead to the acquisition of a Junior Certificate. The "general" educationist would probably consider it "profitable" if the child's "general education" is advanced but to what extent must it be advanced to be profitable?

From the preceding paragraphs it is obvious that similarly to their attitude in regard to aims for the junior adolescent, the framers of the course were extremely reluctant to commit the course to any pre-determined aims, also in respect of divergent ability groups. This lack of definite aims present to my mind one of the main weaknesses of the course.

Bent and Kronenberg⁽¹⁾ in emphasising the value of aims, declare:

"Without definite aims and purposes, secondary education would be chaotic rather than orderly. It would be impossible to formulate any guiding principles of method or curriculum construction. The aims give direction to all activities and

1. Principles of Secondary Education p. 31.

enable one to answer such questions as 'What is the purpose of secondary education?' 'What activities should be provided?' 'How can secondary education be evaluated?'"

As in the case of the junior adolescent the lack of definite aims for divergent ability groups does not facilitate evaluation and consequently it may become necessary in the course of this study to use the universally accepted aims of secondary education, or the aims which may be derived from the characteristic development of secondary education in the Cape, or both together, as evaluative criteria.

(d) Features of Curriculum and Organisation:

(i) Duration:

The junior secondary course is a three-years course, as recommended by the de Villiers Commission. The division into standards i.e. Std. VI, VII and VIII is maintained; as a matter of fact the manner of introducing the course described earlier i.e. a standard per year left no doubt that the recommendation of the Commission in this respect, was ignored.

"The course has been so delimited that the syllabuses can be covered by the average pupil in the time allowed" (E321 p. 4. par. 2)

"Curioser and curioser" could be the comment of a Lewis Carroll character. That this sentence could find its way into the introducing description of a new system designed to extend the benefits of secondary education to all children irrespective of whether the I.Q. is 130 or 80 is astonishing; that it could be published without any explanation as to how the below-average pupil

should fit into this three-year scheme "delimited" for the average pupil, is unbelievable.

It is obvious that the below-average pupil in a course delimited in such fashion could do one of two things, (i) take longer over the course, in other words, fail or (ii) cover less than the average pupil, in other words, do an attenuated course. These alternatives have subsequently been threshed out, discussed and lectured upon by educational experts and Departmental spokesmen at Conferences and short courses for teachers.⁽¹⁾ This means in effect that the Department was improvising in an attempt to meet the needs of the below-average child as the need arises; there was no policy to give direction to the manner of absorption of the below-average child into the secondary system; no niche prepared for him in the new educational edifice purported to have been erected to bring the right kind of ^{Secondary} education to each.

(ii) Curriculum:

For the first and second years of the course the following subjects comprise the compulsory minimum:

(a) Non-Examination Subjects: Religious Instruction, physical education, music (as class subject)

(b) First language, second language, general science, general mathematics, social studies, art, at least one form of handicraft selected from: woodworking, agriculture, artcrafts, needlework and domestic science;

1. Some of the principles and methods enunciated in this respect will be discussed in the section of this chapter dealing specifically with the dull-normal child.

third language.

For the third year the compulsory minimum is:

(a) Non-examination subjects: Similar to 1st and 2nd years.

(b) First language, second language, general science, either general mathematics or social studies.

(c) Two of the following: general mathematics if not taken under (b), social studies if not taken under (b), art, a form of handicraft, a second form of handicraft, music (as examination subject) type-writing, business methods and bookkeeping, a third language.

As originally introduced the rigid nature of the course offered very little opportunity for the free choice of subjects. In this respect the curriculum is in apparent agreement with the principles laid down by the de Villiers Report in this respect. This agreement is more apparent than real, however; the Junior High School course envisaged by the Report would provide for ability groups for each subject and within these ability groups interest groups would be recognized. The junior secondary course made no such provision with the result that the compulsory aspect presented a more formidable appearance, especially to the child of lesser ability.

However, individual schools made use of the right granted by the following clause (E 321 p. 1):

"Every school is expected to introduce the new course to the extent rendered possible by the teaching facilities at its disposal."

As a result changes in the course were introduced

immediately although the general appearance of the curriculum as outlined was retained as far as possible. The time allotted to the various subjects allowed for additional time of $4\frac{1}{2}$ hours per week for the first two years and $1\frac{3}{4}$ hour per week in the 3rd year. This additional time could be used by the school, as desired, for supplementary work, guidance, etc.

(iii) Exploration:

The one aim of the course that has been definitely stated is to discover and develop the special aptitudes and intellectual capacities of each child. To achieve this object teachers are instructed that they, as well as their pupils, should regard the first year and part of the second year of the course as exploratory. By being compelled to do almost the whole range of subjects in the first two years, pupils' acquaintance with such a large variety and the teacher's observation of the pupils' achievements and perhaps, also the guidance service's findings, could be used to advise pupils in their further choice of subjects and to a certain extent in their eventual choice of a vocation.

Several major defects in this prescribed exploratory scheme is in the writer's opinion sufficient to nullify its value completely for the majority of pupils and quite definitely for the child of below average ability.

(a) It is accepted that, to offer exploratory

opportunities the course should comprise a large number of compulsory subjects for the exploratory period. The compulsion clause ensures that the pupil will make the acquaintance of a large number of subjects. Once the exploratory phase is passed, however, any further compulsion would limit the value of the original exploration because effect could then not be given freely to the findings and conclusions of the exploratory years. In the structure of the three years course the element of compulsion is too strong in the third year to make the exploration of the first two years worth while.

(b) The second major defect is that about half the period intended for the course is ear-marked for exploration; eighteen months to decide what to study during the next eighteen months. For the below-average pupil who will not proceed beyond Std. VIII and for the vast majority of them who would never reach Std. VIII this means an exploratory secondary course only, with no possibility of enjoying the fruits of exploration.

(c) A third serious defect is the lack of provision for an efficient system of guidance and individual records, both as envisaged by the de Villiers Report. A syllabus in guidance is included but there is no compulsion on the school to make use of it; neither is the school compelled to allot time to guidance, although it is recommended.

Very casual mention is made of the value of the pupil-record cards and one could hardly expect teachers to become enthusiastic about a new feature which would add considerably to the administrative work of the

school if the founders of the new system could not even wax enthusiastic about it.

How the only clearly expressed aim of the course, i.e. the discovery and development of the special aptitudes and intellectual abilities of every child could be organised and brought into relation with the results of exploration for the benefit of each individual pupil, in the absence of an efficient guidance service and personal records, is inexplicable.

Possibly the approach of the framers of the course to the whole question of exploration is best explained by this revealing sentence about the exploratory years:⁽¹⁾

"The course will fail in its purpose if these years are used merely for guiding pupils to find soft options for a final examination."

In the whole of the introduction to the new course only one paragraph of two sentences ~~is~~ devoted to the exploratory aspect and one of the two sentences is a warning against too free a use of exploration because the final examination must be kept in mind!

Truly, it was not the spectre of the old hanging over the new; it was the old itself moulding the new to its own image!

(iv) Examinations and Certification:

(1) At the End of the Third Year:

The regulations as originally published (E321 p. 7) provided for internal examinations, which, together with the results of an external control examination, would be used for classification of candidates at the end of the

third year.

To pass in the examination as a whole a candidate has to offer six subjects and pass in both official languages, (one on the higher grade) three other subjects and in the aggregate. $33\frac{1}{3}$ per cent of the possible number of marks is required to pass in a subject and for a pass in the aggregate 40% of the total number of marks is required.

A pass in the examination as a whole would entitle a candidate to a Junior Certificate issued by the Cape Education Department - for all purposes the same certificate which rounded off the old 2 years Junior Certificate Course - in fact, "as you were!" The duality of purpose of this Certificate has not changed in any way. It is still a schoolleaving certificate for those who would leave their desks for employment at this stage, as well as a promotion certificate which is the "Open Sesame" to the exclusive Senior Certificate course.

In addition to the retention of a single dual-purpose certificate, the ideal of a full internal examination did not come to pass ^{and} although the external part of the examination continue to be the most important part. Out of a total of 1900 marks for the whole examination the external examination now counts for 690 marks made up as follows: First Language, 240 marks out of 400 for the external examination; Second Language and General Science 225 marks each for the external examination, out of 300. The proposed control examination which was introduced to ensure uniform high standards and then used to check standards had dis-

appeared completely.

No mention is made of the position of the pupil of below average ability in respect of the final examination, excepting that statements may be issued to candidates who have not gained a certificate. The nature of these statements and their value, either to acquire employment or to gain admission to another type of school e.g. a technical high school, is absolutely unknown. It is doubtful whether anyone had been able to extract information regarding the value of these statements of attainment, from either the Education Department or from employers of labour.

(2) At the end of the first and second year of the course.

"When required, certificates, signed by the principal of the school and countersigned by an inspector of schools, will be issued to pupils who satisfied the requirements of the first year or the second year examination. These requirements are, mutatis mutandis, the same as those which apply to the examination at the end of the course."

This is the only and last word on promotion within the course and means in effect that the free and easy flow between the stages of the course as envisaged by the de Villiers Commission was a dead letter. The one all-important factor which for years had obstructed secondary education for all i.e. failing with the resultant retardation was retained in the junior secondary course.

(v) Subsequent Interpretation, Improvisation and Instructions:

The junior secondary course described and briefly

analysed in the fore-going pages was in its main features, its aims and organisation a very pale shadow indeed of the heaven of educational righteousness envisaged by the de Villiers Commission. But then it must be remembered that there is a vast difference between the drafting of an ideal scheme and the putting into practice of a new educational system. The latter may find the former quite unattainable

"-----in a world where we wrestle with the principalities and powers of practical politics and financial stringency and with the tradition of the elders as represented by the public whose bondage in the law is conservatism."(1)

Could this be the explanation for the apparent "pull devil, pull baker" features of the junior secondary course as outlined in the preceding pages? Was the apparent paucity of specific aims and lack of enthusiasm for age-promotion and guidance and exploration mere strategy; the first essential moves in the gradual introduction of a new system which many would regard as revolutionary? Or could it be that, amongst the architects of the course, the traditional element has won the day?

The writer does not pretend to know the answer to these questions. It is significant, however, that in propagating the new course; in lecturing conferences and in instructing teachers at short courses, Departmental spokesmen were prepared to move far beyond the tenets of the letter of the junior secondary course, especially as far as examination and proposed methods of differentiation for divergent ability groups are

1. From a speech by Dr. E. E. G. Schnell, Cape Town, March 1955.

concerned. Some of these new moves were preceded, others followed, by announcements in "The Education Gazette."

Concessions in regard to examinations were:

(1) For general science marks are awarded for cumulative tests.

(2) For the Junior Certificate examination in Social Studies, only the work done during the third year is examined.

(3) The final examination in general science examines the work of the Stds. VII and VIII years but then only in basic principles.

(4) The pupils' knowledge of a prescribed book is tested as soon as the book has been studied, and never again.

(5) For promotion of pupils at the end of the first and second years of the course, marks may be awarded for class-work as well as for a series of cumulative tests.

In addition it has been suggested by senior professional officials of the Education Department⁽¹⁾ that provision should be made for the needs of three ability groups in one and the same examination paper. Papers should be drafted in such a way that one-third of it should test basic knowledge only; a further third should require direct application of the basic knowledge and the remaining third will require advanced application. Thus the below-average child with his attenuated course could attain the required $33\frac{1}{3}$ per

1. From a speech by Mr. J. D. Mohr, Chief Inspector of schools.

cent for a pass by knowing the basic facts well, while at the other end of the scale the above-normal pupil could attain close on 100 per cent by his ability in the advanced application of basic knowledge.

These changes and suggestions manifest a totally different attitude to the problem of promotion than that evinced by the junior secondary course in which it was found necessary to sound a warning against "soft options for a final examination"!

Similarly, with regard to differentiation we find Departmental spokesmen offering advice and suggestions much more in harmony with the spirit of the de Villiers Report than with the precepts of the junior secondary course. In terms of the latter the division in standards are to be maintained but the spokesmen mentioned advocated forms of differentiation within the standards. Suggested forms of differentiation to provide for the divergent ability groups were acceleration and retardation (As you were!) enrichment and attenuation, drill-methods for the dull-normal and self-activity methods for the gifted, etc. Although none of these were worked out in detail they were offered for consideration by inspectors of schools, headmasters and teachers.

These subsequent interpretations, additions, etc. had to be mentioned at this stage in the present study to indicate that there were educationists moving beyond the letter of the junior secondary course in an attempt to provide for the needs of pupils of divergent abilities. The results of their advice and suggestions as far as ~~these~~ *these* have been accepted and put into practice by the schools

should also be reflected in the findings of any investigation or survey which attempt to evaluate the success of the junior secondary course as far as the dull-normal pupil is concerned.

3. THE DULL-NORMAL CHILD.

The second objective of this chapter was the identification of the dull-normal group of pupils and an analysis of their educational needs: their needs as dull pupils as well as their needs as adolescents.

(a) General Ability:

In the discussion on the recognition of individual differences by the makers of the junior secondary course it was pointed out that they accepted the findings of modern psychological findings in respect of general ability. Whether this acceptance was due to any predilection for the findings of modern psychology or whether it originated from an uncomfortable awareness that the acceptance of any other dictum of individual differences e.g. the "type-minds" of the Norwood Report, would bring the Union Education Department charging into the field of secondary education, is a moot point.

After having accepted, by intimation, the principle of general ability, the framers of the course did not make any further attempt to identify ability

groups, excepting for the group of I.Q. less than 80. Once again it was left to Departmental spokesmen to indicate various ability groups according to levels of general intelligence, years after the course had been inaugurated.

The view that there is a central ability or factor which has an influence on the level that can be attained by an individual in whatever form of work he does, is as old as Aristotle from whose ETHICS Sir Cyril Burt quote:

"There are some who are wholly wise, not wise only in some partial direction"⁽¹⁾

Burt declares

"The hypothesis of general ability is one of the most fruitful that has emanated from recent psychological research."⁽²⁾

To indicate the fact that the difference between innate disability and acquired backwardness was recognized even outside the research laboratories of the psychologists, Burt quotes the old choirmaster in

The Way of all Flesh as saying

"Some boys are born stupid - and that might be thee, Jim; some achieve stupidity for thou has't greatly increased thy birthright; and some have stupidity thrust upon them, which, an it please the Lord, shall never be thy case."⁽³⁾

For the purpose of the present study we are concerned only with the first of the choirmaster's groups i.e. those with an innate mental disability. Acquired backwardness due to environmental factors, operating

1. The Backward Child. p. 9.
 2. Ibid. p. 9.
 3. Ibid. p. 8.

since birth, is outside the scope of this study.

In educational organisation the importance and all-pervading and permeating qualities of this general innate ability have been recognised for many years. Children who were mentally defective were sorted out and sent to special schools or classes on the assumption that they are for educational purposes, equally defective in all subjects.

"This theses" claims Burt, "---- certainly holds good for children and nowhere is it exemplified more plainly than among the dull, the backward and the feeble-minded. It is a truth demonstrated by the results of psychological testing applied to thousands of school pupils."⁽¹⁾

Galton was the first to propose a convenient unit to assess general ability. He suggested that this general ability might be measured with psychological tests and devised the coefficient of correlation to evaluate the importance of causal factors common to a series of measurements. Wissler making use of Pearson's modification applied Galton's correlation technique in the search for a method to isolate and evaluate the fundamental elements of general and specific ability. That was in the year 1901.

In 1904 C. Spearman reported that there was "a fundamental function common to all intellectual activities." In 1907 Sir Cyril Burt with the aid of Dr. Flugel and R. C. Moore

"----- applied tests to every level of cognitive process, and found common factors entering into all. The highest common factor appeared to be mainly inherited, and therefore identifiable with what Galton had

1. The Backward Child. p. 10.

termed 'natural ability' and Binet 'general intelligence'.

This word "intelligence" has become the generally accepted term for this "innate, all-round, intellectual efficiency"⁽¹⁾ This concept of intelligence has caused much controversy. Actually the main differences in these controversies ~~were~~ differences of emphasis. W. Stern interpreted intelligence as the ability to profit by experience and to adjust to novel situations. Terman conceived intelligence to be the ability to do conceptual and abstract thinking, reasoning and problem-solving. S. Colvin regards intelligence as general learning ability, a very useful concept for educational purposes. G. D. Stoddard believed that

"intelligence is the ability to undertake activities that are characterized by (1) difficulty, (2) complexity, (3) abstractness (4) economy (speed), (5) adaptiveness to a goal, (6) social value and (7) the emergence of originals (inventiveness) and to maintain such activities under conditions that demand a concentration of energy and a resistance to emotional forces."⁽²⁾

In 1923 Spearman formulated his theory that intelligence consists of a general factor "g", and special abilities "s". Earlier, in 1920 Thorndike had suggested that intelligence have three aspects, abstract, mechanical and social. Kelly and Thurstone arrived at a multiple-factor theory and G. Thomson favoured a three-factor theory, the factors being (1) a general intellectual factor which operates in

1. The Backward Child. p. 9.

2. Quoted by Lester & Alice Crow: Adolescent Development and Adjustment p. 109 from G. D. Stoddard "On the Meaning of Intelligence," Psychological Review Vol. 48, p. 225, 1941.

all mental activities (2) a number of group factors which are not general but operated in related or allied activities e.g. a mathematical factor, a linguistic factor, etc. and (3) a large number of specific factors.

Actually all these definitions did not in any way shake the concept of intelligence as an "innate, general, cognitive capacity."⁽¹⁾ In one of his most recent works,⁽²⁾ from which the above quotation was taken, Sir Cyril Burt explains that recent writers have introduced a great deal of confusion in their discussions on the "nature of intelligence" because they were unfamiliar with the history of the term "intelligence" as well as with the concept. Burt then continues to explain that Spencer used the word "intelligence" for the concept which Galton called "general ability" and sometimes "natural ability". Binet who followed Spencer's French disciples, Taine and Ribot, established the Spencerian term.⁽³⁾

This means that when a psychologist uses the word "intelligence" it is used in a technical sense and not in a popular sense.

"It denotes, first of all, a quality that is intellectual and not emotional or moral: in measuring it we try to rule out the effects of the child's zeal, interest ----- Secondly it denotes a general capacity, a capacity that enters into everything the child says or does or thinks ----- Thirdly, intelligence is by definition an innate capacity."⁽⁴⁾

Burt points out that, after statistical work had confirmed the findings of psychologists i.e. that there

1. Sir Cyril Burt: The Causes and Treatment of Backwardness. p. 64.

2. Ibid.

3. Ibid.

4. Ibid.

was a "common component underlying all cognitive activities and that differences in this common component were largely inborn" a convenient word had to be found to denote this concept and the word "Intelligence" was accepted for this purpose. Consequently any arguments about whether intelligence includes zeal or interest, or whether it denotes a general capacity or whether it is inborn or acquired, is nonsensical.

As a matter of fact it is one of the primary criteria for a good intelligence test that it should measure only that which is inborn. The less the results of the test are affected by the child's emotional attitude or acquired skills the better test of intelligence it will be.

In analysing the Norwood doctrine of three educational types Burt⁽¹⁾ is adamant that:

"Any scheme of organisation which proposes to classify children at the age of eleven or twelve according to qualitative mental types rather than according to general intelligence is in conflict with the known facts of child psychology ----- The one thing which the analysis of mental measurements has demonstrated beyond all doubt is the supreme importance during childhood of the general factor of intelligence."

For the purpose of this study we accept the dictum of the existence of an "inborn, general cognitive component" known technically as "Intelligence". We also assume that this component can be measured. (Thorndike: "Whatever exists at all exists in some amount")⁽²⁾

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1. David W. Oates: The New Secondary Schools and the selection of their pupils. p. 10. (Quoting from Burt's paper "The Education of the Young Adolescent" in the British Journal of Educational Psychology, XIII, November 1943 p. 126 - 140)
 2. Monroe and Engelhart; The Scientific Study of Educational Problems. p. 171.

and expressed in terms of an educationally useful unit, the mental age. We further assume that generally the mental age increases proportionately with the increase in chronological age and that the ratio between the two, expressed as a mental ratio or intelligence quotient remains fairly constant throughout the child's school life.

This "constancy" of the I.Q. has been the matter of much controversy. Several factors could influence this constancy e.g. (i) the validity and reliability of the testing instrument i.e. the particular intelligence test; (ii) environmental influences which may exert a stronger influence upon mental development at certain ages than at others; and (iii) special training which could stimulate faster mental growth.

"The child who remains in a relatively constant environment probably will maintain a ratio between his chronological and mental age that expressed as I.Q. may vary no more than about 5 points. With changes in environmental conditions these point differences may become greater. ----- A young person, however, who continues to experience relatively constant educational advantages tends to give evidence of comparative constancy of mental development. His I.Q. can be expected to have predictive value for several years at least."⁽¹⁾

Sir Cyril Burt states⁽²⁾

"----- during school years the mental ratio is approximately constant. This general uniformity has now been demonstrated by a formidable array of investigations. An important corollary follows. The constancy of the ratio must confer a useful power of prediction. Having measured a child's rate of development for the first few years of his life, we can foretell, with a fair degree of assurance, both his subsequent course of progress and his ultimate intellectual limit. -----such prophecies are borne out by the

1. Lester and Alice Crow. Op. Cit. p. 118 - 119.
2. Sir Cyril Burt: The Backward Child. p. 33 - 34.

child's later development in nineteen cases out of twenty."

The I.Q. as representing the result of a measurement of an inborn factor should follow the normal curve of distribution if plotted for a representative cross-sectional sampling of the general population. It is this normal distribution of the I.Q. which provide a means of dividing the general population into various mental ability groups. Lester and Alice Crow point out that the I.Q. which is a statistical device is

"relatively meaningless unless the I.Q.'s are classified into categories that represent continuous but differing levels of ability to perform."⁽¹⁾

It is this concept of different levels of intelligence distributed according to the normal curve of distribution which enables us to identify our different mental ability groups including the groups in which we are interested for this study, - the dull-normals.

(b) Identification and Incidence of Dull-Normality:

Having accepted the precept expounded in the foregoing paragraphs with regard to general ability and the distribution of intelligence, we can now set out to identify the group known as dull-normals. It must be emphasised very strongly that the term dull-normal is, like intelligence, a technical, psychological term. The term "dull" is often loosely used by educationists and teachers to denote all pupils who reveal scholastic

1. Op. Cit. p. 116

weaknesses or retardation whether the causative factors are of the innate, cognitive type or environmental, physical and educational. In this study we are not concerned with the latter group. Acquired "dullness" or retardation presents a totally different problem; a perennial in the calendar of educational problems, no doubt, and one which, as far as the junior secondary course is concerned, calls urgently for investigation and solution, but one which demands a different approach and different methods of investigation.

In the nomenclature of the psychology of intelligence there are also to be found different terms for the dull-normal group as well as different I.Q. allocations. This must be expected because with different intelligence tests the distribution of I.Q.'s will differ numerically to a certain extent, depending on the particular test. The relative position on a graded classification or on the normal distribution curve would remain the same i.e. immediately below the normal.

L. M. Terman gives the following levels of intelligence: ⁽¹⁾

<u>Descriptive Term</u>	<u>I.Q. Range.</u>
Near genius or genius ...	140 and above
Very Superior	130 to 139
Superior	120 to 129
Above Average	110 to 119
Normal or average	90 to 109
Below Average	80 to 89

1. The Measurement of Intelligence, p. 79

Dull or Borderline	70 to 79
Moron	50 to 69
Imbecile	25 to 49
Idiot	0 to 24

Terman's designation for the group immediately below the normal is below average and the group has a range of I.Q. 80 to 89.

The de Villiers Commission tried to compare ranges of intelligence with various occupational categories as follows. (1)

<u>I.Q.</u>	<u>Occupational and Educational level.</u>
(i) Below I.Q. 70	Simple manual work; occupations for which no "pre-job" training is required. Incapable of passing Std. VI (of the old school)
(ii) I.Q. 70 - 95, sub-divided into two groups:	
(a) I.Q. 70 - 85	Lower grade factory operatives, waitresses, railworkers, etc.. Would normally not succeed in a course of training at a vocational high school unless it is exclusively practical.
(b) I.Q. 80 - 95	Higher grade shop assistants, lower grade clerical workers, high grade factory operatives, housekeepers, stewards, etc. Normally not capable of completing a senior course (at a vocational school). Many would reach the Junior Certificate standard (old school) in <u>general vocational training.</u>
(iii) I.Q. 90 - 110	Artisan, smaller farm manager, stenographer, etc. This class represents average intelligence and most of them could complete a Senior Certificate Course.
(iv) I.Q. 105 - 120	Will often acquire technical, supervisory and administrative positions.

Capacity above average and capable of study beyond Std X level.

- (v) I.Q. 115+ Executives, teachers, doctors, engineers, etc.
Superior intelligence capable of taking a university degree.

The range for each occupational group is fairly wide and the Commission provided for an overlap between the different categories which is in accord with Burt's dictum in this connection:

"The lines of division ----- are by no means clear-cut. The defective merge into the dull, and the dull into the normal -----."(1)

To the sub-category immediately below the normal or average group, the dull-normal group, the Commission allotted the I.Q. range 80 - 95.

Dr. E. F. G. Schnell of the Cape Education Department in his Cape Town speech, mentioned earlier, proposed the following demarcations between the various ability groups:

<u>I.Q.</u>	<u>Description.</u>
(i) 83 -	<u>The Sub-Normal.</u> This is the group drafted into special classes in the primary school and therefore diverted from the stream which reaches the secondary school
(ii) 83 - 95	<u>The Dull-normal.</u> Usually able to complete the primary course but experience difficulty in passing anything higher. Before compulsory education they usually left school after having passed Std. VI or having failed Std. VII.
(iii) 95 - 115	<u>The Normal.</u> Can pass the Junior Certificate examination without difficulty and with hard work can also pass Std. X

- (iv) $\pm 115 - \pm 135$ Superior Group.
Obtain good passes; often 1st classes in Std. X. Able to pass the latter with minimum of work.
- (v) 135+ Very Superior Group.
The relatively small, highly gifted group.

Speaking at the same Conference as Dr. Schnell in 1955, the Departmental Psychologist, Dr. N. J. du Preez, indicated the lower and higher boundaries for the dull-normal to be I.Q. 80 and 95 respectively.

For purposes of identification of the dull-normal group in this study, we accept these lines of demarcation i.e. I.Q.'s 80 - 95 inclusive, on the results of the South African Group Test. This was the group intelligence test in general use by the psychological service of the Cape Province at the time the above mentioned spokesmen drew attention to the dull-normal group.

A very sound practical suggestion for delimiting ability groups is Burt's well-known dictum:

"For immediate practical purposes the only satisfactory definition of mental deficiency is a percentage definition based on the amount of existing accommodation."⁽¹⁾

This definition can be used for delimiting the groups in need of institutional care and also the group in need of special education at the primary stage. In the case of an ability group where the problem of special accommodation does not arise, for the present in any case, such a definition is not particularly helpful or illuminating.

In our opinion, in spite of the fact that the

1. Cyril Burt: Mental and Scholastic Facts. p. 179.

acceptance of definite I.Q. boundaries might appear dogmatic, any other basis of demarcation would be unrealistic in view of the above-mentioned official indications for delimiting the dull-normal group.

The I.Q. range of 80 to 95 represents numerically many more pupils than for instance the range below I.Q. 85 which, on the South African Group Intelligence Test, represents the certifiable mentally handicapped pupils⁽¹⁾ and the mentally deficient. On this test the percentile rank of I.Q. 85 is 10.4 and the percentile rank for I.Q. 95 is 33.6. This means that the certifiable group represents ~~s~~ \pm 10% of the school population (actually less because children of I.Q. below 60, being considered low-grade mentally deficient, are seldom accepted in the Special Classes) where-as the dull-normal group represents 23.2% or slightly higher because our accepted lower boundary for the dull-normal is I.Q. 80.

In his speech, mentioned earlier, the Departmental Psychologist of the Cape Province gave the incidence of dull-normality as 23%. This figure would be acceptable in a large unselected group. To a certain extent the influence of the earlier practice of retardation and failing in the primary school must still tend to make the secondary school population a somewhat selected group. The actual incidence of dull-normality in the junior secondary course can be expected to be somewhat lower than 23% until such time as a general system of age or automatic promotion is adopted in the primary school.

1. Certifiable for transfer to Special Class for mentally handicapped children in terms of the Special Schools Act 1948, as amended.

At first sight this incidence appears to be greatly in excess of what one would expect, especially if the implication is that this group will experience difficulty at the secondary school level. Research have shown however that the percentage of pupils with an intelligence level necessary for the proper study of classics, mathematics, science and modern languages (a good grammar school education) is rather low. The National Foundation for Educational Research in England and Wales states:(1)

"Experience suggests that some ten per cent of school children are equipped for their mastery (i.e. the grammar school subjects); it may be that the percentage is nearer five per cent than ten."

This view is also held by Dr. F. M. Earle from whose work Reconstruction in Secondary Education Watts and Slater quote:(2)

"It can safely be asserted that the proportion of the child population of any town or district that can benefit in any real sense from a linguistic and literary curriculum is seldom more than 10 per cent."(3)

With an incidence of $\pm 20\%$ there were an estimated 7,000 to 8,000 dull-normal pupils in the junior secondary course (Stds. VI, VII and VIII) of the Cape Province in 1957⁽⁴⁾; a huge amount of valuable human material; a huge labour and wealth potential and a huge educational problem!

1. A. F. Watts and Patrick Slater: The Allocation of Primary School Leavers to Courses of Secondary Education, First Interim Report. p. 21.

2. Op. Cit. p. 21.

3. The course Dr. Earle had in mind would include two languages in addition to English. Watts and Slater declare that few teachers would deny that the same thing is also true of mathematics and science.

4. Estimated from the latest available Education Statistics of the Department of Education, Cape of Good Hope.

(c) Needs of the Dull-Normal Junior Adolescent.

Now that we have arrived at a criterion for the identification of the dull-normal group i.e. the intelligence quotient and have accepted the lower and the upper limits of the group to be I.Q. 80 and I.Q. 95 respectively, the next task is to analyse the needs of this group. In analysing the aims of the junior secondary course, earlier in this chapter, mention was made of the lack of definite aims in the course especially as far as the dull-normal child is concerned. The architects of the course are perhaps not wholly to blame. The four principles enunciated by Wesley⁽¹⁾ for determining objectives include the following two; (i) they must be susceptible of being achieved through instruction (ii) they must suggest activities that are within the capacities of the school population.

It would not have been an easy task to formulate objectives in respect of the dull-normal which would have passed the criteria of Wesley because so very little is known about the dull-normal group. Various degrees of subnormality and also of super-normality have been studied deeply during the past fifty years but hardly anything exists in the nature of research results or empirical descriptions in respect of the dull-normals. The reasons for the lack of specialised studies in this direction, both in South Africa and in Britain and America are fairly obvious.

Prior to 1953, the dull-normal group did not

1. E. B. Wesley: Teaching the Social Studies.
pp 118 - 119.

really constitute a problem in the secondary schools of the Cape Province, because the majority of this group never reached the secondary stage in their school careers. The Std. VI examination providing a successful candidate with a schoolleaving certificate; the system of continuous failing aided by inspectors of schools armed with little arithmetic cards in deceptively gay colours; a schoolleaving age of sixteen for the "benefit" of those who could not clear the hurdles of the Std. VI examination or those gay little cards: all these ^{factors} combined effectively to bar the vast majority of mentally dull-normal from the secondary schools.

In the primary schools, prior to the advent of the Departmental psychological services, it was difficult if not impossible to isolate and identify the dull-normal group from the larger group of backward pupils of which they formed a part. Teachers were aware, like Burt's Choirmaster, that some were "born stupid" and other "acquired stupidity" but they had no scientific means of categorizing individual pupils accordingly; neither were the gay little cards very helpful in this respect, nor their dispensers for that matter. Consequently few specialised studies of the abilities of this group could be undertaken.

Both in Britain and in America there were circumstances, which need not be mentioned in detail, but which made it imperative that the feeble-minded and, to a lesser degree, the super-normal received the major share of research and investigation into divergent mental ability groups.

Under prevailing circumstances the makers of

the junior secondary course did not go beyond asserting that

"-----+the special abilities and intellectual capacities of each pupil should be discovered as early as possible and his education so planned that the time he spends at school may be as profitable as possible" (E321 p. 2.)

It is also the declared objective of the junior secondary course to meet the educational needs of the junior adolescent. We have pointed out that, on account of their higher average age caused by retardation in the primary school, the dull-normals will present, in respect of pubescence, a more homogenous group than the other mental ability groups in the course. Consequently the objective to meet the needs of the junior adolescent is of special importance to the dull-normal group.

"Atypical adolescents can be expected to experience the inner drives, urges and interests that are characteristic of other teen-agers. The fact that a young person is a deviate does not lessen or eliminate his fundamental physical and psychological needs. Since the satisfaction of his felt needs may be limited by his atypical condition, he often encounters frustration-arousing situations."⁽¹⁾

No educationist will doubt the truth of this assertion. The awareness of these facts had for years been directing educational policies in respect of mentally handicapped pupils in Special Classes. It provides us with a very important objective i.e. the elimination of frustration-arousing situations.

Discussing the bases of frustration, Lester and Alice Crow declare:⁽²⁾

"The adolescent becomes extremely sensitive to the accepted mores of his culture. He

1. Lester and Alice Crow: Op. Cit. p. 266.
2. Op. Cit. p. 299

wants attention, he seeks approval of his associates, he strives for security, and he needs the ego satisfaction that accompanies successful achievement in one or another of his areas of activity."

It could only be in an unrealistic dream-world where one could hope not to experience any frustrations or where all activities would lead to successful achievement. But all difficulties and disappointments are not frustrating, not even to the hyper-sensitive adolescent.

"A barrier becomes a psychological obstacle when or if the individual recognizes it as a threat to his self-realization. Existing goals outside the adolescent's interest range do not become psychological barriers to him."⁽¹⁾

On the other hand

"----- to be unprepared for an available coveted job; to be recommended for a position and then to fail the preliminary test ----- to 'lose face' by failure to meet an important commitment - all these represent environmentally stimulated frustration situations that may produce emotional reactions varying with the degree of emotional stability possessed by the person or persons concerned."⁽²⁾

This is not the place for an extensive study of adolescent problems but the basic factors of adolescent needs mentioned in the preceding paragraphs and quotations should also be basic to any system of education purporting to provide in the needs of dull-normal adolescents.

Some characteristics peculiar to the mentally retarded adolescent and consequently also to be expected in the case of the dull-normals are given by Lester and Alice Crow:⁽³⁾

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1. Lester and Alice Crow. Op. Cit. p. 298.
 2. Ibid. p. 301.
 3. Ibid. p. 288 - 294

(i) The development of motor ability and eye-hand coordination follow approximately the same pattern of individual variation in both mentally retarded and mentally average adolescents.

(ii) The mentally retarded experience difficulty in dealing with abstractions, in making comparisons and in arriving at accurate, objective generalizations.

(iii) Verbal ability, whether in vocabulary or expression is poor and colorless; composition concerned with the concrete and present rather than with the remote or imaginative.

(iv) Adolescents of both sexes in this group prefer remunerative, activity-stimulating jobs to study or school attendance.

(v) Teaching approaches must be adjusted to their present level of understanding and their immediate interests.

In addition to their more specific needs, as mentally below-average pupils and as adolescents, the dull-normal group will also require provision for the more general needs which they share with all other humans; the basic needs of a worthy and full life in our civilisation. These basic needs are generally well-covered by educational aims enunciated and accepted by the majority of systems of education. Some well-known statements of objectives to keep in mind in this connection are:

(1) Aims of the Commission on the Re-organisation

of Secondary Education of the National Education Association; U. S. A.⁽¹⁾

- (i) Health
- (ii) Command of fundamental processes.
- (iii) Worthy home membership.
- (iv) Vocation.
- (v) Citizenship.
- (vi) Worthy use of leisure.
- (vii) Ethical character.

(2) Alexander Inglis⁽²⁾ indicated three objectives for secondary education which he derived from an analysis of the activities of individuals:

(i) The social-civic aim i.e. the preparation of the individual for worthy citizenship and membership of society.

(ii) The economic-vocational aim - the preparation of the individual as a future worker and producer.

(iii) The individualistic-avocational aim - developing of essentially personal attributes such as use of leisure, development of personality, etc. which are also of importance for society.

(3) Touton⁽³⁾ collaborating with graduate students,

1. Quoted by de Villiers Report. p. 22.
 2. Alexander Inglis: Principles of Secondary Education. p. 368.
 3. Quoted by Bent and Kronenberg: Principles of Secondary Education. p. 52.

expressed the aims of secondary schools in terms of the activities in which the pupils should be directed, to:

- (i) Develop physical fitness.
- (ii) Apply fundamental processes to scientific and social phenomena.
- (iii) Discover interests and aptitudes.
- (iv) Use native capacities to the maximum.
- (v) Prepare for economic independence and advanced training.
- (vi) Participate in diversified aesthetic and recreational activities.
- (vii) Evolve high standards of conduct in personal and group life.
- (viii) Contribute to a worthy home life.

Even these few examples of objectives suffice to illustrate the universal character of educational aims and objectives; aims and objectives which are also applicable to the dull-normal group in the secondary school.

Apart from these universal aims, there are aims which, as indicated in Chapter I (vide supra pp 1 - 2) developed out of a particular milieu, system or organisation to express national aspirations in respect of culture, economics, social standards, race relations, etc. In a multi-racial country these aims are of particular importance for the dull-normal European child.

In tracing the development of education in general and secondary education in particular in Chapter I it

was emphasised that universal European education was one of the prophylactic measures advocated by the Dutch Reformed Church against the danger of Europeans finding themselves in economic competition with the natives (vide supra p. 3).

In this connection the following extract from Dr. J. R. Lynch's unpublished D. Ed. thesis "Differentiated Education in the Transvaal Secondary School 1900 - 1950" is worth quoting:

"If the United States is prepared to spend such considerable large sums of money to provide secondary education for all its citizens, how much more necessary is it for us to do so for our European South Africa population. Here we have a position almost unique in the world of today where a small white population is in control of a large black population. If secondary education is necessary for the large numbers of American white youth whose vocations in life will be that of hewers of wood and drawers of water how much more necessary is it to provide secondary education for even the least intelligent of our European South African youth, who, owing to the present economic structure of our society must fill positions in life which are of a skilled or at least a semi-skilled nature."

(4) CONCLUSION:

In the preceding pages five factors were indicated which influence the formulation of educational objectives for the dull-normal adolescent. These factors are (i) the aims of the junior secondary course as expressed in its introduction; (ii) the specific needs of pupils with below average intelligence; (iii) the specific needs of the adolescent; (iv) universally accepted aims for all pupils; (v) National and educa-

tional aspirations that developed from the child's own ethnological and political milieu.

The objectives which derive from these five factors will provide the criteria for evaluating the junior secondary course in its measure of success or failure in respect of providing secondary education for the dull-normal child.

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SECTION B

INVESTIGATION
OF THE PROBLEM

CHAPTER IIIAIM, METHODS, TECHNIQUESAND SUBJECTS.1. AIM OF THIS INVESTIGATION:

In the introduction to this dissertation it is emphasised that the writer's main objective is to endeavour to supply the answer to the question: "How well does the Junior Secondary Course succeed in meeting the needs of the dull-normal pupil?" This investigation is not intended to be an experimental study conducted to determine the specific educational methods, procedure, curriculae etc. which will produce the best results. Instead it seeks to determine the measure of success of the existing methods, procedures, curriculum and organisation of the junior secondary course in respect of dull-normal pupils as reflected by the latters' school careers and scholastic achievements.

The steps towards this goal were indicated (vide supra p. xi) as (i) tracing the background of secondary education in the Cape Province, (ii) studying the system designed to meet the needs of the dull-normal, (iii) identifying the dull-normal group, (iv) studying the school careers and achievements of a group of dull-normal pupils, (v) analysing the information acquired and (vi) concluding the study by evaluating the results

of the course in respect of the dull-normal and making recommendations accordingly.

In SECTION A we dealt with the first three of these steps; in CHAPTER I with step (i) and in CHAPTER II with steps (ii) and (iii). In SECTION B we deal with steps (iv) and (v) as follows: CHAPTER III - aims, methods and techniques and description of the group under investigation; CHAPTER IV - information acquired regarding personal aspects and school careers of the pupils in the group and CHAPTER V - scholastic achievements on standardised tests, school examinations, schoolleaving and certification.

In CHAPTER II (p. 101) the general factors which should provide the criteria for evaluating the secondary course were given. These factors have been discussed and analysed in SECTION A. It would be unnecessary, and rash to a certain extent, to extract from the five general factors given in CHAPTER II (p. 101) a complete list of evaluative criteria by which the results of the junior secondary course may be judged. Such a list of criteria would in effect be just another list of educational aims. Each of the five factors have been fully analysed and it should be possible to judge the results of the course under consideration by measuring these against the demands of each of the five factors. Inordinate failing of secondary subjects, for instance, would be an indication that the specific needs of pupils with below average intelligence are not being met; a high incidence of failure of standards would lead to frustrations and would not meet the needs of the adolescent; failure to acquire some form of recognition of

work done which is acceptable to employers would not meet the national and educational aspirations developed from the child's own milieu; failure to profit from the course would not meet the declared aim of the junior secondary course, etc.

2. METHOD AND TECHNIQUES OF INVESTIGATION:

The method used and the techniques employed in the investigation of any problem are determined by the nature of the problem. This statement has the ring of a truism but in this particular investigation the nature of the problem eliminated the possible use of certain well-established and proven methods so decisively that the reiteration of the statement appears justified.

Mention was made in this study (vide supra p. vii - viii) of a small-scale investigation carried out by the writer in 1955 - 56. The results of this preliminary investigation revealed that any longitudinal or genetic studies of the dull-normal child in the secondary school are contra-indicated because of the high incidence of early school-leaving. Whether this pattern of early drop-outs of dull-normals from the secondary school persisted after the initial strains and stresses of the course have passed is one of the factors being investigated. Should the pattern persist a continuation study would peter out long before any significant results have been achieved.

A cross-sectional study of the status survey type⁽¹⁾ seems to be indicated in this case. On its own this method would supply the answers to a number of general questions but so does the official statistics of the Education Department. These official statistics may indicate general tendencies but do not answer questions on success or failure of specific ability groups.

To be able to realise our stipulated objectives with this study it was found necessary to accumulate as much personal and scholastic data of as many dull-normal pupils as possible; in other words a case-study approach.

"The case-study type of descriptive research may operate also as case-group investigations. More or less unitary social or academic groups are isolated for analysis, usually with the purpose of possible improvement. As in the case of individual checks, these researches may also be either status studies or continuity surveys extending over appreciable periods of time."⁽²⁾

Continuity surveys being contra-indicated by the results of the preliminary investigations and purely cross-sectional status surveys being inclined to be impersonal, the method deemed most suitable for this study is the case-group investigation carried out as a status study.

After the method of research was decided upon, several difficulties inherent in the educational system and geographical expanse of the Cape Province presented themselves.

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1. F. L. Whitney: The Elements of Research, Third Edition. p. 167.
 2. Ibid..p. 174

(a) Lack of Pupils' Personal Records:

Even the introduction of the junior secondary course with its emphasis on the individual did not succeed in popularising a system of pupils' personal records in Cape Provincial Schools. Several years prior to the introduction of the course the completion and safe keeping of an official pupils' record card was made compulsory in all secondary schools in the Province. However the compulsion did not carry much weight. In many cases principals of schools and Inspectors of Schools alike failed to appreciate the value of such records with the result that some schools did not keep record cards at all, others kept the cards but did not complete them properly and only a negligible number of schools completed the cards properly and used them for the purpose for which they were intended.

This lack of an efficient personal record system in the schools made the task of collecting data concerning the school careers of pupils a formidable one, thus limiting the possible number of pupils that could be used for the investigation. It also made imperative the use of a questionnaire for part of the research.

(b) Geographical Expanse:

The vast expanse of the Cape Province made it impossible to spread the investigation over all or even most of the 195 high and 61 secondary schools⁽¹⁾ distri-

1. Report of the S.G.E. for 1957. p. 44.

buted over its 277,113 square miles. The case-study approach make it imperative that the investigation should be as personal and intimate in respect of each child of the group as is necessary to achieve the objectives of the research. Accordingly the writer considered it inadvisable to assign the application of the research techniques and test surveys to assistants.

Because the nature of the research made it imperative for the investigator to do practically all the work personally, the physical expanse of the Province was another limiting factor as far as the numbers to be included in the test group were concerned.

On account of these limiting factors it was decided to select schools from the Border and North-Eastern districts area, which would be representative of all the main types of high and secondary schools in the Cape Province. From the schools selected a sample of dull-normal pupils would be drawn according to the identification criterion described in CHAPTER II.

The actual steps in the formation of the case group were:

(a) Permission was sought from the Cape Education Dept. to carry out the proposed investigation in Provincial Schools. Permission was granted on condition that the names of the schools and the pupils concerned would not be divulged.

(b) The next step was the selection of thirteen secondary and high schools. The selection was done on the basis of

(i) schools representative of types of schools in the Cape Province,

(ii) schools of which the principals were willing to co-operate and

(iii) schools situated within the writer's official circuit, which made it possible to utilise test results obtained in the course of the writer's official duties.⁽¹⁾

(c) Using the identification criterion described and accepted in CHAPTER II i.e. intelligence quotients of 80 to 95 inclusive on the old South-African Group Intelligence Test,⁽²⁾ all the dull-normals in the junior secondary course of the thirteen selected schools were identified. Pupils whose I.Q.'s on the New South African Group Intelligence Test were available, were re-tested with the old S. A. G. Intelligence Test.

(d) Lists of names of dull-normal pupils in their respective schools (junior secondary course) were then submitted to the principals of the selected schools with the request that the names of pupils who, in the Principal's opinion, did not fall in the dull-normal group, should be deleted.

Of 256 names of dull-normal pupils appearing on the 13 nominal rolls the Principals concerned deleted the names of only three pupils as not being in the dull-normal group thus providing quite incidentally striking testimony to the prognostic and diagnostic value of the old South African Group Intelligence Test!

-
1. As organiser of Special Classes and School Guidance.
 2. This test is now known as the old South African Group Intelligence Test to distinguish it from the New South African Group Test introduced in 1955.

(e) Of the remaining 253 dull-normal pupils a prospective case group of 230 pupils were compiled. Of these 10 pupils were eliminated afterwards on account of school-leaving, transfers, absence from examinations or tests, etc. leaving a group of 220 pupils for investigations.

(f) In compiling this final group no attempt was made to obtain equal numbers of boys or girls or English or Afrikaans speaking pupils. It was more important to include as many of the identified dull-normal pupils as possible in the test group. The fact that 220 pupils out of a possible 243 (256 - 3 - 10) were included indicates that the usual problem of sampling did not present itself in this case. Very nearly all identified dull-normal pupils were included; the 23 not included were eliminated at random from the list of the larger schools to prevent these schools contributing too dominant a contingent to the test group. For the same reason all the dull-normal pupils in the junior secondary course of the smaller schools were included.

This completed the formation of the case-group. The question arises whether reliable conclusions may be drawn from a sample of 220 pupils.

It has been calculated that the number of dull-normal pupils in the junior secondary course in the Cape Province was \pm 7,000. A research sample of 220 present 3.14% of the total dull-normal group with which we are concerned. For a case-study type of investigation this seems to be a reliable sample numerically. The choice seems to be between large numbers and a

large number of assistant research workers on the one hand and a smaller number with one research worker. In the writer's opinion the latter alternative would produce much more reliable results because of the single control over the instruments and techniques of investigation and the test situations.

The only question in this connection would be whether the sample is representative of the whole group. E. F. Lindquist⁽¹⁾ states that educational experiments with small representative groups usually produce more accurate results than experiments with numerically stronger groups because a small group is more easily compiled in such a way that it is representative of the whole group.

In the present investigation there could hardly have been errors in sampling as far as the group is concerned, because very nearly all the dull-normals in the schools concerned were included in the case-group. In this case the only possibility of error of sampling could have occurred in the selection of the thirteen schools. It has been pointed out and it will be shown in more detail when the schools are discussed that all the wellknown types of high and secondary schools are included in the selected group.

There could be objections against the fact that all the schools in the selected group are situated in one corner of the Cape Province. The fact that this "corner" includes sub-tropical as well as barren Karoo areas; predominantly English-speaking town populations

1. Statistical Analysis in Educational Research. p. 9

and predominantly Afrikaans-speaking rural populations; the homes of the descendants of the Voortrekkers as well as the homes of the descendants of the British and German Settlers should, in the writer's opinion, over-rule any such objection. School populations are sufficiently varied and educational facilities sufficiently diverse to represent in this "corner" all the variations and diversity that may be expected over the wide expanse of the Cape Province. It must be borne in mind that the expanse of the "corner" is such that the distances between some schools in the selected group are in the vicinity of two hundred miles!

The description of the thirteen schools in the third section of this chapter should provide ample proof that they represent all the well-known types of schools in the Cape Province.

Prof. Dr. E. H. Venter in his academic study of super-normal pupils used one city school for drawing his sample of less than 100 pupils for an experimental group. J. C. Mentz engaged on a similar study as Prof. Venter used two high Schools on the Witwatersrand to draw an experimental group of one hundred pupils.

Considering these facts and taking in consideration the intensive nature of the study the writer is satisfied that the use of a larger group in this type of study would tend to superficiality and that the intensive case-group investigation should be limited to manageable numbers.

Having dealt with the steps which led to the formation of the case-group it remains for the purpose

of this section to deal with the procedure, the techniques and instruments used on the group. These techniques and instruments will be discussed more fully when their results are tabulated, evaluated and discussed. They are mentioned here for the sake of continuity.

It was never the object of this study to draw comparisons between experimental groups of pupils. We know without asking that the general scholastic achievements of the dull-normal group would be lower than that of normal pupils. What we would like to know is whether they reach a standard of achievement which can be considered satisfactory and in which subjects and examinations. To judge on these aspects it is necessary to measure the standard of achievement, either by standardised tests of achievement or by the traditional method of school examinations, or both. If comparisons are necessary it could be made against the norms of standardised tests and against the Provincial medians of public examination results. These procedures would obviate the need for establishing a normal group for purposes of comparison, always an arduous task and in many instances providing highly unsatisfactory norms for purposes of comparison.

The formation of the case-group was completed by the middle of 1957. The third school term of the year i.e. July to September during which period the writer was on furlough, and free to carry out the research project, was used for studying the group with the aid of the techniques and instruments decided upon.

These were:

(a) A pupil-questionnaire drafted by the writer with the object of obtaining from the members of the case-group themselves, relevant information regarding personal facts, home background, primary and secondary school careers, health, hobbies, recreation, achievements etc.

The questionnaire was submitted to six practical educationists for trial completion and comment. In its improved form it was submitted to members of a Std. VII class (not included in the group) for trial completion and then the final form was drafted. Because the writer arranged to have all the questionnaires completed in his presence under controlled conditions, a number of difficulties that tend to make a questionnaire investigation unreliable, were obviated at the outset.

A full description of the questionnaire will be included in CHAPTER IV (vide infra) when the information obtained by the questionnaire is tabulated and analysed.

(b) The following standardised scholastic tests of the National Bureau of Educational and Social Research were decided upon:

(i) Silent Reading Tests:

Paragraphs Junior Form A (NB34) for English speaking pupils.

Paragrawe Junior Form B (NB36) for Afrikaans speaking pupils.

(ii) Language Usage Tests:

English Usage Junior Form B (NB72) for
English speaking pupils.

Afrikaans Taalgebruik Junior Form A (NB77)
for Afrikaans speaking pupils.

(iii) Arithmetic Tests:

Fundamental Processes Form A (NB150)

Grondreëls Form A (NB151) Similar for
English and Afrikaans speaking pupils.

The description and use of these tests will be discussed in CHAPTER V (vide infra) when the results of the tests are discussed.

(c) The next instrument of evaluation decided upon was school examination results. This could not be taken during the third term of the year. It was decided that on account of the static nature of the study in contrast to a continuation study, the examination marks and results in the end-of-the-year examinations in Nov. Dec., 1957, would be taken as the basis for the scholastic achievement part of the investigation.

The possibility of using the school marks obtained at all examinations throughout the secondary career of each child was considered. It was found, however, that the methods of arriving at pupils quarterly marks vary considerably from school to school. Very often the quarterly or half-yearly

marks were arrived at by a series of cumulative class tests. These tests would, if properly conducted, have diagnostic value from the point of view of the subject-teacher but as a measuring instrument it would produce widely different results in different schools. It would for instance produce results which cannot be compared at all if one school has class-tests fortnightly and another has a series of short tests during the last weeks of the term.

Consequently it was decided to use, for the purpose of this study, the results and marks of the 1957 end-of-the-year examinations.

If examination results and marks could be obtained for the 1956 and 1958 end-of-the-year examinations, in respect of pupils from the case-group who were doing repeat-years, these would be utilised for the study of the effect of repeat-years on the scholastic achievement of dull-normal pupils.

After having decided on the techniques and instruments to be used the research proceeded as follows:

(a) The writer visited the thirteen schools during the period July to September 1957 in order to carry out the testing and investigation techniques mentioned. On arrival at a school the Principal, who in all cases were giving full co-operation, arranged to assemble the pupils previously selected for the case-group, in one class-room.

It was explained to the pupils that they were taking part in an investigation aimed at the improvement of our school system. Any assistance

they could give in this connection would be used for the benefit of secondary school pupils throughout the Cape Province. It was further explained to them that the answers given to the questions on the questionnaire would be regarded as strictly confidential and that the individual replies would not be read by any person other than the investigator.

After this informal introduction the standardised scholastic tests were given, usually in the following order:

- (i) Arithmetic - Fundamental Processes.
- (ii) Silent Reading Test - Paragraphs Junior.
- (iii) Language Usage Test Junior.

Rest intervals were provided between these tests. In the majority of cases the questionnaire was completed on the same day after an extended interval following on the last test.

In parallel-medium schools the tests were applied separately to the English- and Afrikaans-speaking groups but the groups were combined for the completion of the questionnaire.

(b) The next step, spread over an extended period, was the correction of the tests and tabulation of results. To minimise the possibility of errors the writer made use of the services of only two helpers:

- (i) A trained K. G. teacher with several years experience of marking scholastic and intelligence tests and
- (ii) A friend - School Guidance Officer -

with high academic qualifications and whose official duties include a high percentage of psychometrics.

Sample checks were carried out by the writer and all possible precautions were taken to eliminate errors in correction and computation. The final figures were tabulated by the writer personally.

(c) The third step in the application of the research technique was taken during the second and third terms of 1958.

The results and marks of the Nov. Dec. examinations of 1957, in respect of the pupils in the case-group, were now collected. In the majority of cases the writer collected these data personally from class schedules in the schools concerned. In the case of a few schools these figures were compiled for the writer, either by the principal personally or by reliable teachers. Where doubt arose in a few cases the writer checked the relevant figures personally.

These results were then tabulated and analysed by the writer. In the case of children who were repeating or have repeated standards in the secondary school the marks of both the first and second years in the same standard were obtained.

(d) By September, 1958, i.e. a year after the completion of the first step of the research project a check was made with the selected schools to discover whether it would be worth while to repeat the

standardised tests for purposes of comparison with the first tests. It was obvious however that, within the one year, the percentage of drop-outs from the case-group was so high that such a re-testing programme could not be expected to yield any significant results.

Arrangements were made, however, to obtain the 1958 Nov. Dec. marks in the cases of pupils who were doing repeat courses.

(e) The final step i.e. the computation, compilation and analysis followed.

It has become clear, even prior to this stage, that any method of investigation or any research technique which depend for success on a test group remaining constant for an appreciable length of time, would be doomed to failure when applied to research on the dull-normal child in the junior secondary course. Under the circumstances pertaining to this ability-group in our secondary schools, the writer is more convinced than ever that the methods and techniques used in this investigation constitutes one of the very few that may be used with any hope of success on research in this field.

3. THE CASE - GROUP.

The method of compiling the case-group, as well as the techniques and measuring devices to which

they were subjected, were described under the previous heading. Before proceeding to the results achieved by these investigations it is necessary to describe the group in more detail.

(a) Origin of the Case-Group:

As described under the previous heading the group was drawn from thirteen schools in the Border and North-Eastern districts area of the Cape Province. The conditions attached to the permission to carry out the proposed investigation in Departmental schools do not allow for the names of the schools to be divulged. Descriptions of the schools are necessary, however, to provide proof that the schools selected are representative of the various types of high and secondary schools in the Province.

School 1. Boys School
 Situated - City
 Language Medium - English
 Grade - High
 Range - Stds. VI - X
 Enrolment 1957 - 500+
 Not exclusive but catering more particularly for the middle and higher income groups. Large boarding establishment.

- School 2. Boys School
 Situated - Country town.
 Language Medium - English
 Grade - High
 Range - Sub Std. A - X
 Enrolment 1957 - 700+
 Not exclusive but catering more particularly for the middle and higher income groups. Large boarding establishment.
- School 3. Boys School
 Situated - Country town.
 Language Medium - English
 Grade - High
 Range - Stds. II - X
 Enrolment 1957 - \pm 400
 Fee-paying but not exclusive.
 Caters for the same socio-economic groups as schools 1 and 2. Large boarding establishment.
- School 4. Girls School
 Situated - Country town
 Language Medium - English
 Grade - High
 Range - Std. VI - X
 Enrolment 1957 - 300+
 Caters for the same socio-economic groups as 1, 2 and 3. Large boarding establishment.

- School 5. Girls School
Situating - Country town
Language Medium - English
Grade - High
Range - Std. IV - X
Enrolment 1957 - 500+
Have to cater for all classes
on account of being the only
English-medium girls high
school in the town. Large
boarding establishment.
- School 6. Girls School
Situating - Country town.
Language Medium - Parallel-
medium but predomi-
nantly Afrikaans.
Grade - High
Range - Std. III - X
Enrolment 1957 - 400+
Have to cater for all classes
being the only girls high school
in the town. Large boarding
establishment.
- School 7. Boys School
Situating - Country town
Language Medium - Parallel
medium but predomi-
nantly Afrikaans.
Grade - High

Range - Std. III - X

Enrolment 1957 - † 500

Have to cater for all classes being the only boys high school in the town. Small boarding establishment.

School 8. Mixed Boys and Girls School.
Situated - City
Language Medium - Afrikaans
Grade - High
Range - Stds. VI - X
Enrolment 1957 - 400+
Have to cater for all classes being the only Afrikaans medium high school in the city.
Small boarding establishment.

School 9. Mixed Boys and Girls School
Situated - Country town
Language Medium - Afrikaans
Grade - High
Range - Stds. VI - X
Enrolment 1957 - † 200
Have to cater for all classes being the only Afrikaans medium high school in the town.
Small boarding establishment.

- School 10. Mixed Boys and Girls School
 Situated - Country village
 Language Medium - Parallel
 Grade - High
 Range - Sub. Std. A - X
 Enrolment 1957 - \pm 400
 Have to cater fo all classes
 being the only high school in
 the village. Small number of
 boarders.
- School 11. Mixed Boys and Girls School
 Situated - City
 Language Medium - Parallel,
 but predominantly
 English.
 Grade - Secondary
 Range - Sub Std. A - VIII
 Enrolment 1957 - \pm 250
 Caters for the lower income
 groups. No boarding establishment.
- School 12. Mixed Boys and Girls School
 Situated - City
 Language Medium - Parallel
 Grade - Secondary
 Range - Sub Std. A - VIII
 Enrolment 1957 - 500+
 Caters mainly for lower and
 middle income groups. No
 boarding establishment.

School 13. Mixed Boys and Girls School
 Situated - City
 Language Medium - Parallel
 Grade - Secondary
 Range - Sub Std. A - VIII
 Enrolment 1957 - \pm 500
 Caters mainly for lower and
 middle income groups. No
 boarding establishment.

The foregoing descriptions of the schools selected indicate their high representative value of the types of secondary and high schools to be found in the Cape Province.

Schools Nos. 1, 2, and 3 typify the English-medium boys schools in town and country.

Schools Nos. 4 and 5 typify English-medium girls schools.

Schools Nos. 6 and 7 typify the predominantly Afrikaans parallelmedium girls and boys schools of the prosperous rural areas.

Schools Nos. 8 and 9 represent strong Afrikaans-medium high schools in town and country.

School No. 10 represents the typical small rural high school catering for all classes and both language groups.

Schools Nos. 11, 12 and 13 represent the secondary schools situated in the less prosperous areas of the city and drawing their pupils from the lower income groups.

(b) Composition of the Case-Group.(i) Distribution of the Group according to School Standards, Sex and Home Language.

As indicated earlier no deliberate attempt was made in the formation of the case-group to draw equal numbers of any particular standard, sex or language group. The 23 known dull-normal pupils in the selected schools who were not included in the group, were eliminated at random from the Std. VI and VII lists of the larger schools (English and Afrikaans about equally) to prevent the numbers from these schools to dominate the group.

Table III - Distribution According to School Standards, Sex and Home Language.

Stds.	English Girls	Afr. Girls	Total Girls	English Boys.	Afr. Boys.	Total Boys	Totals
VI	15	30	45	27	28	55	100
VII	20	14	34	35	11	46	80
VIII	2	12	14	10	16	26	40
Total	37	56	93	72	55	127	220

On account of the fact that not quite 100% of the known dull-normal pupils in Stds VI and VII in the selected schools were included in the group the above distribution in respect of these standards may not quite reflect the distribution in the selected schools.

It was not intended that it should.

In respect of the figures for Std. VIII, however, the position is that all the dull-normals in all the selected schools were included in the case-group. The relevant figures in Table III therefore reflect the actual distribution of dull-normal pupils in Std. VIII in the selected schools at the time i.e. in July 1957.

(ii) The Distribution of Intelligence Quotients in the Case-Group. (S.A.G. Intelligence Test).

Table III reflects besides standards also the home language and sex distribution with the object of presenting a full picture of the composition of the case-group. It is not intended to make comparative studies of boys and girls or of English- and Afrikaans-speaking pupils. For one thing the numbers would not allow such comparative studies eg. there are only 2 English-speaking girls in Std. VIII. Comparisons will only be made where it is obvious that significant facts can be derived from it. Hence in the following tables distribution is indicated only according to standards and the factor under consideration.

Table IV: The Distribution of Intelligence
Quotients in the Case-Group
(S.A.G. Intelligence Test)

I.Q.	Std. VI	Std. VII	Std. VIII	Total
80	18	17	3	38
81	2	2	2	6
82	1	3	0	4
83	4	3	2	9
84	3	5	0	8
85	5	2	1	8
86	5	3	0	8
87	4	6	3	13
88	5	0	3	8
89	6	4	2	12
90	9	3	6	18
91	11	4	2	17
92	44	5	5	14
93	4	8	3	15
94	10	1	4	15
95	9	14	4	27
Total	100	80	40	220
Average I.Q.	87.9	87.57	88.95	87.91
Median I.Q.	88.5	86.8	89.66	88.66

According to the criterion accepted for the identification of the dull-normal the I.Q. range of 95 to 80 is indicated by Table IV. It will be noted that

the arithmetical average as well as the median I.Q.'s for the three standard-groups are very similar.

The lowest I.Q. group i.e. 80 appears to preponderate in the Stds. VI and VII groups. This is however a false impression as 47% of the Std. VI group and 43.75% of the Std. VII groups have I.Q.'s of 90 to 95 as against 33% and 40% respectively with I.Q.'s of 80 to 85. This means that the standard-groups are well balanced as indicated also by the average and median I.Q.'s for the whole group.

It may be objected that pupils with I.Q. 80 - 85 should not have been included because, according to the Special Schools Act of 1948, as amended, these pupils should have been certified for transfer to the existing special classes for mentally handicapped pupils attached to primary schools. The very fact however that these pupils are in the junior secondary course refutes any such objections and justifies the acceptance of an I.Q. of 80 as the lower limit for the case-group.

(iii) Distribution of the Case-Group according to Chronological Age.

The chronological ages of the members of the group are important on account of several factors included in their study. It will be remembered that one of the objections to the old education system in the Province was the extreme retardation of pupils in the primary schools. An analysis of the ages of the group should indicate whether retardation persisted after the introduction of the new system.

The age distribution would also indicate the degree of homogeneity (or lack of it) in the respective standards.

Table V. Age Distribution in the Case-Group and a comparison with Provincial Median Ages.

Age. (Years and Months.)	Std. VI	Std. VII	Std. VIII	Total
12;6 - 12;11	3			3
13;0 - 13; 5	7			7
13;6 - 13;11	14			14
14;0 - 14; 5	13	6		19
14;6 - 14;11	20	4	1	25
15;0 - 15; 5	18	20	1	39
15;6 - 15;11	14	19	2	35
16;0 - 16; 5	7	13	9	29
16;5 - 16;11	3	8	6	17
17;0 - 17; 5	0	5	10	15
17;6 - 17;11	1	3	9	13
18;0 - 18; 5		1	1	2
18;6 - 18;11		0	0	0
19;0 - 19; 5		1	1	2
T O T A L	100	80	40	220
Average Ages	14;10	15;10	16;11	16;0
Median Ages	14;10	15; 9	17; 0	15;6
Median Ages for the Province, 1957	13; 8	14; 8	15; 7	
Retardation	1.2	1.1	1.5	

A striking feature of the age distribution is the wide range within each standard group. In Std. VI the range is from 12 years 6 months to 17 years 11 months i.e. 5 years 5 months; in std. VII it is from 14 years 3 months to 19 years 3 months, a range of 5 years, and in Std. VIII from 14 years 9 months to 19 years 4 months i.e. a range of 4 years and 7 months. Within the group as a whole the range is from 12 years 6 months to 19 years 4 months i.e. a range of 6 years 10 months, or for all practical purposes, 7 years. If this wide age range is possible within the same ability group it would appear as if the idea of a homogenous junior adolescent group in the junior secondary course has failed significantly.

In this connection the following figures are interesting:

Table VI
Provincial Median Ages for Stds. VI, VII and VIII
for the period 1952 - 1957 (Excluding 1956)⁽¹⁾

Year	Std. VI	Std. VII	Std. VIII
1952	13.79	14.73	15.56
1953	13.81	14.76	15.57
1954	13.81	14.79	15.60
1955	13.84	14.79	15.67
1957	13.77	14.77	15.65

1. Extracted from the Education Statistics of the Cape Education Dept. for the respective years.

It will be noted that there is no significant difference between the median ages for a standard from year to year. The introduction of the new primary school course and the junior secondary course did not bring about any material change in this connection.

Conclusion:

In this chapter the aims of this investigation, the methods and techniques employed and the formation and composition of the case-group have been discussed. In the following chapters of this section the results of these procedures will be tabulated and discussed.

It need to be emphasised at this stage that where facts and figures are given for the whole group or for standard-groups in the form of tables for the sake of convenience of interpretation, all the available data in respect of each individual child have been studied together, in the first place. This was done so that any specially significant facts regarding individuals could be taken into account when compiling general tables. It would have been misleading, for instance, to include the end-of-the-year achievement of pupils who have been absent from school for the first two school terms of 1957 with the end of-the-year achievements of the group. The achievements of immigrant-children could effect the tables for the whole group and the facts of their foreign extraction have to be noted.

This, to the writer's way of thinking, constitute

the main difference between a case-group study and an ordinary survey. In the case-group study each pupil is first studied as an individual before he is related to a figure for publication in a table; in the case of the ordinary survey the subjects are nothing but figures at any time.

The order of the next two chapters in this section i.e. firstly the study of the results of the questionnaire which supplied personal information, and following on that the chapter on achievement, has been determined by the importance which the writer attach to this individual factor

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CHAPTER IVTHE PUPIL QUESTIONNAIRE .

One of the instruments mentioned in the previous chapter was a personal questionnaire compiled by the writer in order to obtain information about personal facts, school careers, etc., directly from the pupils of the case-group. A large proportion of the information should have been obtainable without the use of a questionnaire but on account of the general paucity of the personal record system of Cape Provincial Schools this was impracticable.

The questionnaire was not standardised as its aims and objects made such procedure superfluous. The general order and the form of the questions were decided upon after a preliminary draft have been completed for trial and commented upon by half-a-dozen practical educationists. To ensure that the pupils would be able to read and understand the questions sufficiently well to reply to them, a trial application was carried out on a Std. VII class (not included in the group) of low average mental ability. Their difficulties were noted and the questionnaire altered accordingly before being submitted to the case-group in its final form.

1. AIMS:

The main aims of the application of the questionnaire were:

- (a) To obtain information about personal details.
- (b) To obtain information which may have a bearing on individual- and group-standards of achievement.
- (c) To investigate the presence of general tendencies pertaining to this ability-group which may assist in the evaluation of the junior secondary course in its influence on the group.

These are the main aims; the specific aims are revealed in the description of the questionnaire which follows.

2. DESCRIPTION OF THE QUESTIONNAIRE:

The questionnaire starts with an injunction to the pupil to complete the questionnaire fully, accurately and honestly and with a promise that the answers will be treated confidentially and that no personal acquaintance of the pupil ~~will~~ have access to them.

The questionnaire was divided into 6 sub-sections as follows:

- (a) Personal and Family Data:

There are 11 questions in this section. It

contains the identification particulars of each child such as name of the pupil, name of the school, home language, standard, subjects, date of birth and age. Most of the replies to these questions have been utilised in the description of the case-group in CHAPTER III. Results of the questions on the position of the pupil in the family and father's occupation are discussed in this chapter.

(b) Health:

This section, consisting of 7 questions, was included to ascertain whether there were any health factors which were influencing pupils' achievements adversely. It was not intended to draw significant conclusions from this section as typifying the general health conditions of dull-normal pupils. For such purpose a control-group of normal pupils would have been required.

The questions deal with general health conditions, defects of sight and hearing, general physical defects and absenteeism on account of ill-health.

(c) Recreational: Social: Cultural:

Eleven questions in this section seek to determine general tendencies regarding recreation, social and cultural interests and activities, hobbies and the influence of the secondary school on their development.

The questions cover hobbies, the cinema, reading, the radio, youth clubs and movements.

(d) Primary School Career:

The first 3 of the 7 questions in this section are intended for reference purposes only, giving information on the primary schools attended - names and number and when the primary school course was completed.

The next four questions are concerned with failing in the primary school, sports successes and activities and positions of honour and leadership held by the pupil during his primary school career.

(e) Secondary School Career:

With 17 questions this section covers those aspects of the pupils school life with which this study is particularly concerned. The first two questions are concerned with date of entry into the secondary school and the names of secondary schools attended, in other words it has reference value only. Questions 3 to 5 deals with the circumstances and motives which brought these pupils to the secondary school.

Questions 6 to 12 deal specifically with school subjects and for the sake of logical sequence in this study the information supplied by these questions will appear in CHAPTER V, together with the discussions on achievement in the respective secondary subjects. The seven questions concerned deal with subject references and subject evaluation by the pupils themselves.

Questions 13 to 17 deal with guidance in respect of choice of subjects and personal problems, extra-mural activities and positions of honour or leadership occupied by the pupil during his secondary school career.

(f) Vocational Choice.

The five questions are concerned with prospective school-leaving, vocational choice, information and guidance as supplied by the school.

3. APPLICATION OF THE QUESTIONNAIRE:

The mode of getting the questionnaire to the child was described in the previous chapter. English- and Afrikaans-speaking girls and boys were taken together in schools where all these groups were represented. In each and every case a classroom was made available by the Principal for this purpose.

Questionnaires were printed on coloured paper; blue for boys and pink for girls to facilitate handling for purposes of compilation afterwards.

The completion of the questionnaire was done under personal supervision of the writer, an arrangement which obviated most of the difficulties and inaccuracies usually associated with the completion of a questionnaire by children.

On account of the questionnaire being a lengthy one, it was completed in the most cases

after the tests were taken. In every case sufficient time was allowed to complete all the questions.

Discussions between pupils in the classroom were forbidden in order to prevent pupils from influencing each other.

4. RESULTS AND CONCLUSIONS:

(a) Concerning personal and family data:

The data obtained by the first nine questions have been included in Chapter III in connection with the age, sex and standard distributions of the case-group.

Question 10 was included to determine the rank order of the pupils in their families. The object was to search for tendencies in this direction to compare with findings in similar studies concerning the super-normal child.

(For Table VII see next page.)

TABLE VII. DISTRIBUTION OF CASE-GROUP
ACCORDING TO THEIR POSITIONS
IN THE FAMILY.

Position in Family	Number in Group.	Percentage
1	57	25.9
2	56	25.45
3	52	23.63
4	19	8.63
5	12	5.45
6	7	3.18
7	8	3.63
8	1	.45
9	1	.45
10	1	.45
11	2	.91
12	2	.91
13	1	.45
14	1	.45

Although the "first-borns" are in the majority and constitute 25.9% of the entire case-group this fact does not necessarily contradict the findings of the great research psychologists Hollingworth, Terman, Cattel, and others in this connection in respect of the gifted child.

J. C. Mentz⁽¹⁾ in his work on the gifted child

1. J. C. Mentz: *Metodes en Middele vir die Uitkenning en Beter aanpassing van die Begaafde Kind.* (Unpublished thesis. Univ. of S.A.)

found that 43.3% of his experimental group of gifted children were first-born. He then quotes from Hollingworth's *Gifted Children, Their Nature and Nurture* (p. 180) as follows:

"Among the 57 children testing above 135 I.Q., studied by Cobb and Hollingworth, more than half were first born, including the 18 who were "only children." Terman found a proportion greater than chance would allow of first born, among the gifted in California. Nearly three-fifths of his subjects were first born, in families having two children. Cattell found about the same dis-proportion of first born among men of science."

In Table VII, although the first born constitutes the biggest single group, 74.1% were not first born.

Another factor which has to be kept in mind is that this is not a study of the distribution of intelligence. The other children in the families represented in the case-group have not been considered; it could still be that most of the first-born had the highest I.Q.'s in their families although they are in the dull-normal group.

Of the 220 families represented in the group 128 had four children or more; 70 families had six or more. Only 9 families in the group had one child each.

These families by no means presented a cross-section of society as will be seen from the information obtained through the next question.

Question 11: Your father's occupation (Describe)

The following representation of the various occupations enumerated were indicated:

Farmers 44	Truckdrivers 8
Conductors (on trains) 6	Pensioners (Artisans). ... 6
Police Constables (other ranks) 5	Storemen 5
Carpenters 5	Farm Foremen 5
Roadworkers 4	Builders 4
Dam-builders 4	Railworkers 4
Motor Mechanics ... 4	Clerks on Railways (S.A.R. & H.) .. 4
Foremen at State Saw Mills 3	Foremen on National Roads . 3
Checkers, S.A.R. & H. 3	Strikers, S.A.R. & H. ... 3
Train Drivers 3	Shopkeeper 2
Ganger, S.A.R. & H. ... 2	Railway Caretakers S.A.R. & H. . 2
Plumbers... .. 2	Bricklayers 2
Traders, Native Terri- tories 2	School Janitors 2
Shunters, S.A.R. & H. . 2	Painters 2
Ticket Examiner S.A.R. & H. . 2	Printer (Artisan) 1
Shop assistant... .. 1	Sewerage worker 1
Foreman of Native Workers 1	Station Master 1
Taxi owner 1	Soil Erosion Inspector ... 1
Explosives operator ... 1	Trimmer S.A.R. & H. ... 1
Trading Store Assistant 1	Dental Mechanic 1
Municipal Transport Driver 1	Superintendent Goods. S.A.R. & H. . 1
Foreman Union Steel Corp. 1	Bootmaker 1
Dealer 1	Salesman 1
Insurance Manager ... 1	Meterreader 1
Floor laying specialist 1	Shift Boss, Mines 1
Secretary Bldg. Soc. ... 1	Mines foreman 1
Porter S.A.S. & H. ... 1	Male Nurse 1

Foreman S.A.R. & H...	1	Brickblocker	1
Welder... ..	1	Jailer	1
Cleaner S.A.R. & H...	1	Factory Foreman ..	1
Tractor Driver ...	1	Fireman S.A.R. & H. ...	1
P. O. Electrician ...	1	Cinema Operator ..	1
Sheet Metal Worker ..	1	Barman	1
Barber... ..	1	Native Management Municipality	1
Pumper S.A.R. & H. .	1	Roads Inspector ..	1
Stone mason	1	Busdriver S.A.R. & H. .	1
Sugar Estates foreman	1	Court Interpreter ...	1
Coach builder	1	Machinist, Wood ..	1
Foreman S.A.R. & H.	1	Call Boy S.A.R. & H. ...	1
Goods Clerk S.A.R. & H.	1	Deckhand on Tugs S.A.R. & H. ...	1
Roof tiler	1	Truckbuilder	1
Railway Policeman ...	1	General Factotum S.A.R. & H. ...	1
Unemployed Carpenter	1	Work Colony	1
Veterinary Surgeon ..	1		

Twelve pupils indicated that their fathers were deceased and one that his father was living away from them. Three pupils indicated that they ~~did~~ not know their fathers' occupations and three did not answer this question.

Of the 87 occupations appearing in the above list there is only one professional occupation represented by one father i.e. a veterinary surgeon. Of the rest there are two business occupations represented by one father each i.e. the local manager of an insurance firm and the secretary of a building society who occupy

positions of a higher socio-economic standing.

All the rest represent unskilled, semi-skilled and artisan-type of occupations; general duty clerks, small shopkeepers and small farmers from a relatively poor farming area, make up the balance. Although manual workers of one type or another constitute the bulk of this group it would be erroneous to assume any important degree of poverty in the group. On account of the extreme difference in wage levels between European and Non-European manual workers prevalent in South Africa the majority of the workers enumerated in the list are well-paid; at least as well-paid as teachers and quite often better paid. With the exception of one father who is unemployed and one in a work colony the rest may be assumed to be on a fair economic standard.

Culturally and socially the picture may be quite different, however.

(b) Health:

The object of this section was to ascertain which pupils, if any, were suffering from ailments which could effect their school achievement adversely.

The following were the most serious ailments with the number of pupils suffering from it:

Hay fever	...	...	...	2
Asthma	.	...	...	3
Bronchitis	...	...	...	5
Sinus Infection	...	...	...	2
Aenemia	.	...	...	1

Rheumatic Heart	...	...	3
Hernia	...	...	1
TOTAL	.	...	17

According to these figures only 7.7% of pupils in the group suffered from chronic ailments of a serious or difficult nature. Only one child was absent for a long period (2 years) during her primary school career. Of the rest none were indicated as regular absentees on account of ill-health, either by themselves or by their school principals.

As regards strength of the senses of sight and hearing, the answers to this section of the questionnaire indicated that 19 i.e. 8.6% wore glasses permanently, 5 or 2.2% used glasses for reading and two pupils out of the entire group were slightly hard-of-hearing.

It is obvious that according to the information provided by this section there were, with one exception, no cases where school achievement had been unduly influenced by bad health.

(c) Recreational, Social and Cultural:

To the first question - "have you any hobbies?" 197 pupils answered in the affirmative.

Complying with the second part of the question i.e. to name their hobbies the responses were as follows:

(1) In the case of the girls in the group:

<u>Hobby</u>	<u>Number Interested.</u>
Growing Flowers	1
Sports, Outdoor	37
Pets	3
Reading	19
Needlework	21
Collecting data about film stars ...	15
Music, Performances	14
Collecting Post Cards	8
Collecting samples	4
Art Classes (Extra).	3
Stamp collecting	13
Collecting Puzzles..	1
Collecting Coats of Arms	1
Collecting Recipes	1
Gardening	2
Housework	1
Collecting stones	1
Poultry farming	1

(ii) In the case of the boys:

<u>Hobby</u>	<u>Number Interested</u>
Target Shooting	1
Horse-riding	4
Fishing	11
Rugby	2
Hunting	7
Athletics	5
Cycle Racing	1
Pigeons	7

Astronomy	...	...	...	...	...	1
Woodwork (Lathe)	...	...	...	...	...	8
Car Engines, Amateur Mechanics	.	...	...	...	...	4
Model Railway	...	...	...	...	...	1
Other Models - planes, boats, cars	...	...	...	...	...	14
Plaster of Paris Modelling	...	...	...	...	...	1
Music, Performers	.	...	...	...	...	1
Singing	...	...	...	...	...	1
Pets (Mostly birds)	...	...	...	...	...	23
Gardening	...	...	...	...	...	2
Bee-keeping	..	...	...	...	...	1
Collecting - Rugby photos	...	...	...	...	...	1
"	Gramophone records	...	...	...	...	1
"	Stamps	...	...	...	...	21
"	Post Cards	..	...	...	...	10
"	Coins	...	...	...	...	3
"	Samples	...	...	...	...	2
"	Stones	...	...	...	...	1
"	Coats of Arms	...	...	...	...	2

When considering these very comprehensive lists of hobbies the following words of Lester and Alice Crow⁽¹⁾ are of interest:

"The kinds of recreational interests developed by adolescents and the leisure-time activities in which they are likely to engage are determined to a great extent by available opportunities. The adolescent whose family enjoys a better than average socio-economic status can thus develop and fulfill them to an extent that is almost, ----- impossible for the adolescent whose parents are among the underprivileged."

1. Op cit. p. 211.

The high percentage of hobbyists - 89.5% - and the diversity of the hobby interests revealed by the above lists seems to indicate that, not only were the opportunities of our case-group to develop hobbies at home, excellent, but their mental limitations do not seem to have a limiting influence on the variety of their hobby interests.

On the subject of the recreational activities of mentally retarded adolescents Lester and Alice Crow⁽¹⁾ remark:

"Significant differences between mentally retarded adolescents and their more intelligent peers are evidenced in their respective attitudes toward recreational and social activities ----. Mentally slow teen-agers like action. Both boys and girls enjoy outdoor games and sports -----."

This predilection for outdoor games and sports are not reflected in the hobbies of the boys in our case-group. As a matter of fact the preponderance of non-active hobbies are marked in the case of both boys and girls although in the case of the girls outdoor sports represent the highest single interest. In the case of the boys, South Africa's national game of Rugby football has only two adherents according to the list. The explanation is probably that different kinds of sports and especially Rugby were not regarded as hobbies. Relevant questions under the headings "primary school career" and "secondary school career" will throw more light on this question.

1. Op cit. p. 288.

Question 2 under this heading had two parts:

Did the Secondary School assist you with

(a) the choice of a hobby? Yes or No

(b) the development of your hobbies? Yes or No.

The answers were:

	Yes	No	No answer
(a)	35	176	9
(b)	37	154	29

According to these figures the Secondary School assisted only 15.9% of the group with the choice and 16.8% with the development of their hobbies.

Bent and Krcnenberg⁽³⁾ indicate the duty of the secondary school in this connection:

"Increasingly, training in the worthy use of leisure time is becoming more important. The working day is shorter ----- while commercialized amusements have made a wise selection of leisure-time activities more difficult. The school has the task of teaching pupils in one situation how to fill their leisure hours in another. ----- Pupils should be taught to utilize the common means at their disposal in their own homes and communities for leisure pursuits, as found in sports, games, literature, art, music and science. School activities should be selected with this idea in mind."

Our case-group have developed their own hobbies over a surprisingly wide range but they do not give the junior secondary school much credit for this development! Under the old secondary system which had been criticised for preparing pupils for examinations only, the influence on hobbies revealed by

the figures 15.8% and 16.8%⁽¹⁾ could have been considered satisfactory. Under the new system developed with the avowed intention of meeting the needs of the junior adolescent, these figures obviously do not indicate success in this respect.

Q. 3 Using a scale with the object of assisting the pupils with their answers, question 3 was designed to ascertain the position of the cinema as a recreational factor in the lives of these pupils.

The following figures indicate numbers of pupils and the incidence of their visits to the cinema.

(i)	Every day ...	...	...	...	1
(ii)	Once a week..	...	...	...	48
(iii)	Once a Fortnight ..	...	...	...	38
(iv)	Once a Month	...	...	...	52
(v)	Less than once a month ..	...	...	...	66
(vi)	Hardly ever .	...	...	...	10
	TOTAL	...	...	...	215

Five pupils either did not answer this question or gave answers too obscure for grading.

More than 75% of the group attend the cinema once a fortnight or less; more than one-third attend less than once a month. These figures do not confirm the popular notion of the strangle-hold which the cinema is supposed to have on adolescents; at least not as far as the dull-normal is concerned. As a comparatively cheap and easily accessible form of entertainment the cinema has a secure place in the entertainment

1. These two figures represent the same pupils.

of all youth and most adults, The above results indicate, however, that it has not achieved an inordinate domination of the leisure time of our dull-normal group.

Question 6: How many books do you read per month of your own free choice (Prescribed books, magazines and comics not included).

The answers to this question revealed a situation which would be surprising to most educationists:

<u>Number of Pupils</u>	<u>Number of Books read</u>		
40	1 per month
46	2 " "
22	3 " "
31	4 " "
10	5 " "
21	6 " "
7	7 " "
5	8 " "
4	10 " "
2	11 " "
2	12 " "
4	1 " year
4	2 " "
1	3 " "
5	0 " "

4 pupils did not answer this question.

The writer doubted some of these figures. It was possible that 55.4% of the group were reading 3 books or less per month but what seemed incongruous was

that 18.8% were reading 6 to 12 books per month. One would hardly expect to find bibliophiles in a dull-normal group! Yet Lester and Alice Crow⁽¹⁾ mention the fact that both boys and girls in the lower mental group like reading; girls preferring simple love stories and boys "make it yourself" and adventure stories. The figures seem to have been corroborated further by the popularity achieved, even amongst the mentally handicapped pupils, of the recently established free library service of the Province.

Even if the figures appear to be on the optimistic side the answers prove that reading does take a place in the cultural and recreational life of our dull-normal group.

Question 5 was included to investigate the prevalent belief amongst teachers that pupils' preference for reading comics have assumed alarming proportions especially in the case of the dull child.

The question was: How often do you read comics?

- (a) Nearly every day; (b) Quite Often;
(c) Occasionally; (d) Almost never.

The results were:

(a) Nearly every day.	Indicated by 11 pupils.
(b) Quite Often.	" " 29 "
(c) Occasionally.	" " 75 "
(d) Almost never	" " 105 "
TOTAL	220

1. Op. Cit. p. 288.

In this respect then, as far as our group is concerned, teachers' fears have little foundation. With 81.8% of the pupils in the group reading comics occasionally or almost never there could be no undue influence of comics on the reading habits and reading ability of this group.

The figures revealed by this question cannot be regarded as mathematically accurate, but they certainly indicate definite trends. They indicate that comics have recreational function in the lives of $\frac{1}{2}$ 52% of the pupils but that even in this group it is an important factor with a small minority only.

Reading of magazines:

The answers to question 6 revealed that 193 out of the 220 families represented in the case-group subscribe to or regularly buy magazines. Almost every magazine published in South Africa is represented in the lists of names submitted:

<u>Name of Magazine</u>	<u>Number of Households Subscribing.</u>			
Die Brandwag	57
Die Huisgenoot	58
Sarie Marais	16
Rooi Rose	28
Die Jongspan	4
Patrys	2
Die Huisvrou	1
Fyn Goud	30
Taalgenoot	6
Mense	11
Keur	21

Naweekpos	1
Die Landbou Weekblad	10
Christelike Lektuur	8
Femina	6
Panorama	1
Nonquai	1
The Post	1
Personality	42
Argosy	1
Farmers Weekly	38
Field and Stream	3
My Home	1
The Daily Mirror	3
Wide World	1
Boys Paper	1
Home and Life	2
Woman and Home	1
Nursing Magazine	1
Woman's life	6
Stage and Cinema	1
School Friend	3
Film World	2
Woman's World	12
Youth News	1
Woman's Own	3

This list represents nearly all the best in the magazine field in South Africa. Significant is the presence of only three magazines that belong to the sensational "yellow press" type and these are distributed between 52 families i.e. less than 25%.

The nature and range of distribution of "good" magazines (i.e. of the decent, bourgeois type) seem to indicate that not only is the economic level of the households represented in the group higher than is generally expected in the households of manual workers, as asserted earlier in this chapter, but also their cultural level.

A feature of the distribution of magazines in the group is the poor representation of youth magazines. But then, this is also a feature of the magazine world in South Africa. According to the list only eight households received four youth magazines.

The next two questions were intended to discover whether the boys and girls of our case group were reading magazines and newspapers which came to their homes. According to the answers 68% (in equal numbers) were reading newspapers and magazines nearly every day and quite often, 23% were reading them occasionally and $\frac{1}{2}$ 76 indicated that they read newspapers and magazines "almost never".

Questions 9 and 10 dealt with the radio. 72% indicated that they listened in nearly every day; 17% listen in quite often, 8% occasionally and $\frac{1}{2}$ 2 almost never. This means that for $\frac{1}{2}$ 90% of the group the radio is a very popular form of recreation.

All those who listen in including the $\frac{1}{2}$ 8% who do so occasionally indicated a particular programme preference as follows:

Records, new, old and popular draw 58 listeners

i.e. 26%; music - 44 pupils i.e. 20%; drama - 71 pupils i.e. 32%; action stories - 47 i.e. 21%; variety and comedy - 9 i.e. 4%; news and world events - 6 i.e. 2.7%; quiz programs - 2 i.e. .9%.

These preferences are in agreement with what Lester and Alice Crow have to say about the interests of adolescents generally in the radio:⁽¹⁾

"Older adolescents of both sexes seem to be more interested in programs that present comedy, popular song and dance, and historic, romantic and general drama. They also show some interest in programs dealing with political events and international affairs."

As could be expected the interest of our dull-normal group in the sphere of political and international affairs is on the low side but comedy, dance and song and general drama is as popular with them as with adolescents generally.

Question 11 is concerned with the participation of the pupils of our case-group in youth clubs or movements.

The answers indicated the following membership:

(a)	Voortrekkers	...	...	...	...	3
(b)	Boy Scouts	...	...	...	...	8
(c)	Girl Guides	...	...	...	...	3
(d)	Junior Red Cross	.	...	...	...	2
(e)	Noodhulpliga	...	...	...	...	1
(f)	Sunday School	...	...	...	...	120
(g)	Clubs (not included in this list)	...	...	...	...	50
(h)	Jive Clubs	...	...	...	...	11

1. Op. cit. p. 212.

With the exception of Sunday School which is attended by 54.5% of the group, club or youth movement activity do not seem to attract the members of the group. In the first three mentioned i.e. the Pathfinder type of movement there are only 14 pupils.

As far as membership of a Sunday School is concerned it is conceivable, even probable, that the parents were instrumental in enforcing membership.

The clubs mentioned by 50 of the pupils under (g) are mostly newspaper and radio-clubs i.e. there are no club meetings or activities and its most important object is to ensure regular support from a number of registered members. There is no or very little club activity of the kind that develops social relationships.

The meagre support of clubs is characteristic of our times and not limited to our case group. Organisers of youth clubs and movements are forever complaining about lack of support from adolescents. Some of these movements are nothing but archaic remnants of a bygone age and has nothing whatever to offer to modern youth. This is a breach in the edifice of the educational structure which, in a modern community, should also be filled by the schools and in particular by the secondary school. Excluding sports clubs the secondary schools have not achieved much in this direction in the Cape Province.

(d) Primary School Career:

Three questions were given to gather information

about Primary schools attended and the school and year in which the primary course was terminated.

Question 4 - What standards did you fail in the Primary School?

TABLE VIII. STANDARDS FAILED IN THE PRIMARY SCHOOL BY PUPILS OF THE CASE - GROUP

	Sub A	Stds. B	Std. I	Std. II	Std. III	Std. IV	Std. V	Total
Girls	2	2	6	10	13	15	15	63
Boys	5	1	12	9	17	11	15	70
Total	7	3	18	19	30	26	30	133

When scrutinising these figures it must be remembered that these particulars were obtained in 1957 i.e. after the junior secondary course had been in operation for $4\frac{1}{2}$ years and the new primary course for two years longer. All the Std. VI and VII pupils in the case-group and some of the Std. VIII group as well, have spent several years in the primary school since the inception of the new courses. Yet failing is still an important aspect of life in the primary school to judge by these figures. The chance for failing increase by standards, being highest at the Std. III, IV and V stages. The comparatively high figure given for failures in Std. V indicate that there was still no automatic promotion from the primary to the secondary school.

The grand total in Table VIII indicates an incidence of failing for the whole group of 60.4%. On account of the absence of continuous record cards in our school system it was not possible to check the reliability of these figures. It may be assumed, however, that the actual figure, if it differs at all, would indicate a higher incidence of failing; it is more likely that a pupil would forget or conceal a failure than that he would indicate a failure which hadn't occurred.

The figures for primary failings according to the standards of our group are:

Std. VI 59 pupils out of 100 i.e. 59%.

Std. VII 51 pupils out of 80 i.e. 63.7%.

Std. VIII 23 pupils out of 40 i.e. 57%.

The close proximity of these percentages indicate a certain constancy of failing procedure in the primary school, through the years.

Questions 5 and 6, dealing with participation in sports and question 7, dealing with positions of honour or leadership are carried over, for purposes of comparison to the next section of the questionnaire.

(e) Secondary School Career:

The first two questions deal with schools attended and time of entry into the secondary school

Question 3. Why do you attend Secondary School? Indicate by underlining one of the following:

<u>Suggestion</u>	<u>Number of Pupils.</u>
(a) Because you are compelled by law to attend school up to 16 years of age.	18
(b) Because your parents would have compelled you to attend Secondary School in any case.	52
(c) Because <u>you</u> wish to acquire a Junior/Senior Certificate.	144
(d) Any Other Reason (State Reason)	Nil
Number who did not answer.	6

Question 4: Would you leave school now if you are allowed to do so?

To this question 40 pupils answered in the affirmative and 180 in the negative.

According to the responses to question 3, 70 pupils from the group i.e. 31.8% would not have been in the secondary school had they not been compelled to attend, either by the law or by their parents. Now that they are there, a larger number is willing to stay on so that, instead of 70, 40 pupils i.e. 18.1% would leave school immediately if they were allowed to do so. (Question 4)

An interesting response was that of the Std. VIII group of whom one hundred percent indicated under question 3 that they are attending secondary school with the object of acquiring Junior or Senior Certificates.

According to the figures obtained from these two questions, approximately one-third of the pupils went to secondary school against their will but now that they are there only about one-fifth would leave if they were given permission. Approximately two-thirds wish to acquire a Junior/Senior Certificate.⁽¹⁾

Responses to Questions 6 to 12 will be discussed, as indicated earlier, under the various school subject headings in Chapter V.

Question 13 deals with guidance as regards choice of subjects. It was divided into two sections as follows: How often have you had individual discussions with a teacher about your choice of subjects:

- (a) when called in by a teacher
 - (i) quite often (ii) occasionally (iii) never
- (b) when you approached a teacher
 - (i) quite often (ii) occasionally (iii) never

The responses were as follows:

(a) Pupils	(b) Pupils
(i) 5	(i) 4
(ii) 41	(ii) 39
(iii) 163	(iii) 152

The significant fact here is the large number who indicated that they have had no guidance at all as far as a choice of subjects are concerned. When

1. In the trial application of the original draft questionnaire, a fifth alternative was included i.e. "to acquire a good education." This evoked no response from the trial group and was eliminated in the final draft.

over 70% of the group indicate that they received no guidance in this respect, either teacher- or pupil initiated, a serious condition exists. There is of course every likelihood that group guidance were given to the different standards, if not organised, then at least casually. One would expect, however, that with children who are recognized as being of below average intelligence some personal guidance would have been given as regards choice of subjects. This should especially apply to those pupils who have reached the Std. VIII stage.

Pupils who did not answer this question numbered 11 for section (a) and 25 for section (b).

Question 14 deals with guidance in respect of personal problems: How often have you had individual discussions with a teacher about your personal problems.

The results were:

(i)	Quite often	...	...	4
(ii)	Occasionally	...	...	40
(iii)	Never	...	...	174
	Pupils who did not answer	...	...	2

It is not possible to state in this case whether the incidence of guidance interviews were adequate; that would depend on the nature and degree of the personal problems of the case-group.

It is almost unbelievable that a group of 220 pupils of low mental ability and with a high percentage of failing in both the primary and secondary

schools could not have been in need of more individual guidance. Especially would this be the case in a secondary course which has set itself the task to cater for the needs of each individual child. This is what the Junior secondary course had set out to achieve!

Participation in sports was the next aspect of importance in the secondary school careers of our group. For purposes of comparison questions 5 and 6 have been held over from the primary career section to be included here with questions 14 and 15 of the secondary career section.

Number of participants from the group in:

	<u>Primary School Career</u>	<u>Sec. School Career</u>
Rugby	68	81
Cricket	38	56
Soccer	19	10
Tennis	24	66
Hockey	4	32
Netball	40	43
Athletics	91	73

In every case, with the exception of soccer and athletics, the numbers of participants had increased on moving from the primary to the secondary school. The reasons for this increase may be any one, or a combination or all of the following:

(a) Increased interest in sports at adolescent stage;

(b) Increased facilities for sports. Some of

the pupils attended small primary schools with no or little sports facilities.

(c) Increased interest from the side of the school in the sports activities of the pupils. Some small primary school had no facilities, no competitions and consequently no interests in the pupils sports.

Whatever the cause, the fact remains that there was a fair amount of sports participation in the secondary school in respect of the dull-normal group as far as variety is concerned. Also as far as school representation in teams are concerned the position appears to be satisfactory at first sight. The following numbers represented their schools in the various forms of sports indicated:

Tennis	...	...	7
Hockey	...	...	10
Netball	...	...	26
Athletics	..	...	15
Cricket	...	...	30
Hockey	...	...	1
Rugby	...	...	69
Soccer	...	...	3
Rowing	...	...	1

Unfortunately all these figures and also the numbers of participants come from one-half of our group only i.e. from 109 pupils. 111 pupils did not take part in any form of sports whatever.

Also the figures for representing schools are not

as satisfactory as one would want it to be; it would have had more value if indications were given in what teams i.e. 1st, 2nd, 3rd, or 6th etc. the pupil had represented their schools. The questions were actually couched in terms that call for indication of the teams, but in that respect it did not produce reliable results.

In spite of a satisfactory distribution over a variety of sports one feels that all is not well where, in a group of generally healthy boys and girls, drawn from a number of the most sports-conscious schools in the Province 50% do not take part in any form of sports. Is it possible to state unequivocally that these dull-normal pupils really "belong" if half their number do not take part in the extra-mural activities of their schools?

Question 16 of the secondary school career section and question 7 of the primary career section, both dealing with positions of honour or leadership, are also taken together.

TABLE IX. POSITIONS OF HONOUR OR TRUST
FILLED BY PUPILS OF THE CASE - GROUP
DURING THEIR SCHOOL CAREERS.

Positions	Primary Career	Secondary Career
Class Captain	71	41
Sports Captain	27	12
Chairman	0	0
Secretary	6	2
Prefect	13	2
Monitor	17	12
Total Positions	134	69

The preponderance of positions of honour or trust occupied during the primary school career, as against the secondary school career, may be due to the fact that the primary school career presents a much longer period than the time these pupils had spent in the secondary school when the questionnaire was completed.

The fact that 69 pupils from the group, i.e. 31.3% had filled positions of honour or leadership in the secondary school is certainly heartening as far as the factor of "belonging" is concerned. It is obvious that those positions where scholarship counts, such as chairmen- and secretary-ships, are out of their reach. One would like to know how much the fact of their choice for such positions as class- and sports captains and monitors were influenced by an appreciably higher chronological age and possibly bigger physique than their class mates.

(f) Vocational Choice:

There are five questions in this section dealing with five different aspects of vocational choice.

Question 1 which reads "when do you intend to leave school?" produced the following responses:

(a)	After Std. VI	indicated by	15	pupils.
(b)	" " VII	" "	23	"
(c)	" " VIII	" "	119	"
(d)	" " IX	" "	4	"
(e)	" " X	" "	59	"

This expression of intended school attendance is

unrealistic to a degree. More than half i.e. 119 or 54% of a dull-normal group indicating that they wish to leave school after Std. VIII may be an expression of adolescent youth aiming high, but 59 or 26.8% of the same group indicating that they intend to leave school after Std. X is no longer youth aiming high, it is youth out of contact with reality; youth in serious need of guidance. We shall refer back to these figures when discussing the holding power of the junior secondary course.

Question 2. Have you decided on a vocation?

The responses were:

Yes	No
161	55

Four pupils did not answer this question. With such a high percentage decided on their future career and with such high ambition expressed in question 1, question 3 should reveal the substance of the dreams of our group.

Question 3. Refer to question 2 in a single word - "What?"

The result?

	<u>Vocations</u>	<u>Pupils</u>
y	Typists	28
y	Nurses	18
x	Air Hostesses	9
	Florist	1
	Telephone Exchange ...	2
x	Physio-Therapist ...	2

	<u>Vocation</u>		<u>Pupils</u>
	Hair Stylist	... ..	1
x	Dress Designer	... ..	1
x	Medical doctor	... ..	2
x	Teachers	... ..	7
	Rural Telephonists	... ..	5
x	Social Worker	... ..	1
x	Missionary	... ..	1
y	Clerks, Office	... ..	3
	Post Office	... ..	2
	S.A.R. & H.	... ..	15
	Farmers	... ..	11
x	B.A. degree	... ..	3
	S. A. Police	... ..	8
	Motor Mechanics	... ..	9
	Electrician	... ..	1
x	Minister of Religion	... ..	1
x	Pilot	... ..	1
	Printer	... ..	1
x	Draughtsman	... ..	1
	Carpenter	... ..	1
x	Civil Service	... ..	2
	Naval Forces	... ..	2
	Fitter & Turner	... ..	3
x	Commercial Art	... ..	3
x	Dentist	... ..	1
x	Veterinary Surgeon	... ..	1
x	Wool Expert	... ..	1
y	Banking	... ..	7
	Traffic Police	... ..	1

<u>Vocation</u>		<u>Pupils</u>	
x	Geologist ... ..	...	1
x	Lawyer .. ... ..	...	1
x	Air Force ... ..	...	2
	Bricklayer ... ..	...	1
TOTAL			161

If the figures under question 1 indicate lack of guidance, the choice of vocations (marked x) by 41 pupils i.e. 18.6% of the group, indicate the tragedy of lack of guidance. These pupils have evidently no understanding either of their own disability or of the demands of the vocations of their choice.

Another 56 pupils i.e. 25.4% indicated as their choice, vocations (marked y) which may be suitable for their ability group but where severe competition would be met from better qualified and more gifted boys and girls. Here too, an adequate and efficient guidance programme could prevent many future disappointments and frustrations.

The answers to question 4 indicated the sources of vocational information. Parents constitute the source of information for 83 pupils, other relatives for 40, teachers for 8 and other sources such as books, pamphlets, etc. for 50 pupils. Of all possible sources teachers constitute a very bad last.

This fact is further emphasised by the answers to the next question.

Question 5: How often have you had individual

discussions with a teacher about the choice of a career?"

The indications were:

- | | | | | |
|-------|--------------|-----|-----|----------|
| (i) | Quite often | ... | ... | 8 Pupils |
| (ii) | Occasionally | ... | ... | 32 " |
| (iii) | Never | ... | ... | 180 " |

These figures, like the others in this section, speak for themselves. It would have been disappointing under the old system; under the new it is inexplicable.

Conclusion:

Since the implications of the responses and answers to each question of the questionnaire have been discussed together with the relevant question, and since these will be summarised and discussed in their wider implications and in relation to the evaluation of the junior secondary course in Section C of this study it is not considered necessary to summarise the findings of the questionnaire at this stage.

The information supplied by the questionnaire *provide* a clearer and more personal picture of the pupils of our group in their primary and secondary school careers, their sports activities, their recreations and hobbies, their interests and aspirations. With this fuller, more personal and more human knowledge of the pupils of our case-group we can now approach the next step of this study - the investigation of their school achievements.



CHAPTER V."BY THEIR FRUITS
YE SHALL KNOW THEM"A. INTRODUCTION:

In the discussion on the methods and instruments used in this study in CHAPTER III it was stated that the examination marks of the end of the year examinations, 1957, would be used for the purpose of evaluating the results of the junior secondary course in respect of our case-group. It was pointed out that the high incidence of early schoolleaving made it impossible to acquire the marks for the same group of pupils for a number of years. It was also pointed out that the term marks were obtained by different ways in different schools and, for that reason, were not comparable. These considerations left only the final year marks of 1957 to consider, with the final year marks of 1956 and 1958 to utilise in cases of failing and consequent repetition.

1. The Criterion of Examination Achievement.

Much had been said and written about the shortcomings of school examinations as a basis for measuring knowledge of for evaluating schools. Yet, as in the

case of the much-maligned I.Q. in the field of educational psychology, after every onslaught the school examination has emerged like a Phoenix from the ashes to remain the most important and most generally acceptable educational measuring device in existence. Its verdict is accepted by institutions of higher learning, by all professions, by the State and by all kinds of employers.

Its results are even being used for prognostic purposes. Bent and Kronenberg⁽¹⁾ quote the studies of Harl R. Douglass (The Relations of High School Preparation and Certain Other Factors to Academic Success at the University of Oregon, Univ. of Oregon Publication, 3, (Sept. 1931) pp. 12 - 13) of the academic records of 1196 students who entered the University of Oregon in 1926 - 27. He found that the most valuable single factor in predicting the average college mark is the average high-school mark. He found the coefficients of correlation between school marks and College marks as follows:

All subjects .56, science .54, English .49, foreign language .46, social studies .44, mathematics .44, vocational subjects .35. Douglas also mentions the coefficients of 29 others who found the relationship between high school and college marks. For these the median was .55 as against the median correlation of .45 found by 44 studies of the relationship between intelligence test scores and college marks.

1. Op. cit. p. 144 - 145.

In Publication No. 2 of the National Foundation for Educational Research in England and Wales⁽¹⁾, Watts and Slater quote W. Mc Clelland (Selection for Secondary Education 1945 p. 48):

"A child may profit much more from a secondary course than his success mark would indicate"

to which Watts and Slater add

"or much less."

Yet, at the same time

"Mc Clelland and his Scottish collaborators in the field showed that it was possible, by means of a good qualifying entrance examination, supplemented by scaled teachers' estimates of their pupils abilities, to select children for academic courses leading to success in school examinations three years later and with a degree of efficiency indicated by the correlation coefficient of 0.8 between initial and final achievement."⁽²⁾

Where we are not concerned with prognosis at the moment the important fact here is, from the point of view of the present study, that Mc Clelland's team accepted examination results as criteria of success.

The misgivings expressed by Watts and Slater about the soundness of the Scottish criterion are not applicable to our present study. It is not important because in the Junior Secondary Course of the Cape Province promotion and certification depend on passing a school examination. Whether it is a bad thing or a good thing is of no consequence for the objects of this chapter; it is the criterion for success adopted by the makers of the

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1. A. F. Watts and Patrick Slater: The Allocation of Primary School Leavers to Courses of Secondary Education: First Interim Report pp. 14 - 15.
 2. Ibid.

Course. If a pupil failed in a standard he becomes a year retarded and if he leaves school without a certificate he becomes an unskilled worker; these are facts and no amount of argument about the reliability of examinations could change it one iota.

At the same time we feel that the work of Douglass and the investigators he mentions as well as the work of Mc Clelland and his team lend added weight to the decision to accept examination success as one criterion for evaluating the Junior Secondary Course.

2. Results of investigation in Respect of Scholastic Achievement.

In this chapter the results of the standardised scholastic tests and the results of school examinations as described are tabulated, analysed and discussed.

The results of the standardised tests are given to indicate the levels of basic knowledge of our case-group in some aspects of the first language and in the fundamentals of arithmetic.

Concerning the school subjects there will be given under each subject heading the examination results for each of the junior secondary standards. Under the same headings account will also be given of the results of 6 questions from the Pupil Questionnaire which deal particularly with the pupils attitudes to and evaluation of the various subjects.⁽¹⁾ Under

1. These questions were held over from the previous chapter to be discussed simultaneously with school achievements. (Vide Supra p. 161)

each subject heading where the necessary data is available the effect of failing and repeat-years in that particular subject will be indicated and discussed.

Finally the rate of failing, effect of repeat-years on examinations as a whole, certification and the holding-power of the junior secondary course will be indicated and discussed.

B. PUPILS EVALUATION OF SUBJECTS AND EXAMINATION ACHIEVEMENTS.

It was stated in the introduction to this dissertation that it is not a curricular study. For our present purpose we are only interested in pupils opinions and attitudes towards the various subjects of the course and in the measure of success they have achieved in these subjects as reflected by the results of the 1957 examination and in cases of failure, also in the effect of repeat-years.

Although we are not concerned with the contents at the moment, the aims for each subject as set out in the syllabus will be included under each subject heading. Early in this study attention was drawn to the paucity of aims as set out in the Introduction to the Course and at the same time it was pointed out that aims for each subject were included in the syllabus for that subject. For the sake of completeness and in fairness to the designers of the course, these

aims will be included under the various subject-headings.

1. English (First Language)⁽¹⁾

(a) Aims:

The aims of teaching English as First Language are put forward as:

- (i) To train pupils to think clearly and logically.
- (ii) To train them to speak and write logically, correctly and fluently.
- (iii) To give them an elementary insight into the structure of the English language.
- (iv) To train them to read intelligently.
- (v) To introduce them to the "work and thought of great writers."

(b) Pupils evaluation:

The following tables indicate the attitude of the pupils of our group towards English as First Language as revealed by the relevant six questions of the Questionnaire. When assessing the significance of the situation as revealed by these figures or when computing percentages it must be borne in

1. In the Cape Province as in the rest of the Union of S. A. there are two official languages, English and Afrikaans. Englishspeaking children normally study English on the higher grade in the secondary school and Afrikaans on the lower grade, and vice versa. A thoroughly bilingual pupil may study both languages on the higher grade. This is not the case with pupils from our group.

mind that there ~~were~~ 109 English speaking pupils in the case-group. The figures in respect of English have been obtained from these pupils only.

TABLE X.

Question 6. Which subjects in your Course do you like best? English Indicated.

STD	GIRLS	BOYS.	TOTAL
VI	10	9	19
VII	4	7	11
VIII	2	3	5
TOTAL	16	19	35

TABLE XI.

Question 7. Which subjects in your Course do you like least? English Indicated.

STD	GIRLS	BOYS.	TOTAL
VI	2	3	5
VII	1	1	2
VIII	0	1	1
TOTAL	3	5	8

TABLE XII.

Question 8. Name subjects in your Course which you regard as of no value. English indicated.

STD	GIRLS	BOYS.	TOTAL
VI	-	3	3
VII	1	8	9
VIII	-	-	-
TOTAL	1	11	12

TABLE XIII.

Question 9. Name subjects in your course which you regard as having value for you personally? English indicated.

STD	GIRLS	BOYS.	TOTAL
VI	8	18	26
VII	15	21	36
VIII	2	10	12
TOTAL	25	49	74

TABLE XIV.

Question 10. Are there subjects in your course which you find altogether to difficult to master? English indicated.

STD	GIRLS	BOYS.	TOTAL
VI	-	2	2
VII	1	4	5
VIII	-	-	7
TOTAL	1	6	7

TABLE XV.

Question 11. Are there subjects in your course in which your achievements are satisfactory? English indicated.

STD	GIRLS	BOYS	TOTAL
VI	14	16	30
VII	5	15	20
VIII	1	7	8
TOTAL	20	38	58

Summarising the indications of these tables it is evident that 32% of the English speaking pupils like English best, † 7% like it least, 11% regard

it as having no value, 67.8% regard it as being of value, 6% find it too difficult to master and \pm 53% are satisfied with their achievements in English.

(c) Examination Achievements, Nov. 1957.

Std. VI. TABLE XVI.

Distribution of Examination Marks (Percentages) of Case-group in English (First Language).

Marks in Percentages Class Interval = 5	f
20 - 24	1
25 - 29	4
30 - 34	5
35 - 39	8
40 - 44	8
45 - 49	6
50 - 54	7
55 - 59	2

$$N = 41$$

$$A.M = 41.5$$

$$\text{Median} = 41.6$$

$$\text{Mode} = 40$$

$$\sigma = 8.97$$

$$\sigma A.M = 1.4$$

The averages as reflected in the above distribution table are \pm 7% above the required pass mark. Of the group of 41 of whom marks were available, 8

had less than $33\frac{1}{3}\%$ i.e. the pass-mark in a subject which means that 19.5% of the English speaking section of our dull-normal group failed in the examination in their mother tongue at Std. VI level.

Std. VII. TABLE XVII.

Distribution of Examination Marks (Percentages) of Case-group in English (First Language).

Marks in Percentages Class Interval = 5	f
20 - 24	2
25 - 29	10
30 - 34	11
35 - 39	15
40 - 44	9
45 - 49	3
50 - 54	5

$$N = 55$$

$$A.M = 36.8$$

$$\text{Median} = 36.4$$

$$\text{Mode} = 37.5$$

$$\sigma = 7.8$$

$$\sigma_{A.M} = 1.05$$

The averages as indicated by the distribution table are appreciably lower than in the case of the Std. VI group. There are 17 failures in the group of 55 which means that 30.9% of the English speaking section of our dull-normal group failed in the exa-

mination in their mother tongue at the Std. VII level.

Std. VIII.

Eleven pupils offered English, First Language for the Junior Certificate Examination of 1957 and obtained the following symbols:

<u>Symbol</u>	<u>Number of Pupils</u>
E (40 - 49%)	5
F (33 - 39%)	3
FF (30 - 33%)	1
G (20 - 29%)	2

Three pupils failed and none obtained a score of 50% or higher in their First Language at the Junior Certificate stage.

The percentage of passes in this subject are given as 98% for the Province as against the 73% passes obtained by our group.

(d) The Effect of Repeat-Years on Achievement
in English (First Language):

There were 20 English speaking pupils in Std. VI who were repeating Std. VI and of whom marks were available for English (First Language) for both the first and second attempts. Although the numbers are small it was thought that comparisons of the achievements of the same pupils in the same examinations for two consecutive years would indicate what improvements in the standard of the subject may be hoped for at a repeat examination. In effect, does failure and a consequent repeat-year benefit a pupil in this subject and to what extent?

The average improvement for the whole group was:

1956 Examination	=	38.6%
1957 Examination	=	42.2%
Average increase	=	3.6%

This very slight improvement was due to the achievement of 13 pupils out of the 20. The remaining 7 actually obtained lower marks in the repeat year as follows:

Pupil	1st year.	2nd year.
CA	51	38
JW	37	29
MU	45	31

Pupil	1st year	2nd year
HG	57	45
RS	51	42
AC	35	29
MH	29	25

It is interesting to note that 6 of the 7 passed in English at the first attempt but only 3 passed at the second attempt.

Of the 5 who failed at the first attempt only 2 succeeded in reaching the pass-mark in the second year.

This part of the investigation could not be carried to Stds. VII and VIII on account of the small number of pupils for whom the marks of repeat-years were available.

2. Afrikaans (First Language)

(a) Aims:

As is to be expected the aims in respect of the teaching of Afrikaans (First Language) are the same as those given for English (First Language).

(b) Pupils Evaluation:

As in the case of English it must be remembered when interpreting the results of the six Questionnaire questions as revealed in the following tables that there were 111 Afrikaans speaking pupils in our

case-group with Afrikaans as First language. The figures in respect of Afrikaans as First Language have been obtained from these figures only.

TABLE XVIII.

Question 6. Which subjects in your Course do you like best? Afrikaans Indicated.

STD	GIRLS	BOYS	TOTAL
VI	8	10	18
VII	7	11	18
VIII	5	4	9
TOTAL	20	25	45

TABLE XIX.

Question 7. Which Subjects in your Course do you like least? Afrikaans Indicated.

STD	GIRLS	BOYS	TOTAL
VI	5	4	9
VII	0	0	0
VIII	4	0	4
TOTAL	9	4	13

TABLE XX.

Question 8. Name Subjects in your Course which you regard as of no value. Afrikaans Indicated.

STD	GIRLS	BOYS	TOTAL
VI	1	9	10
VII	0	0	0
VIII	0	0	0
TOTAL	1	9	10

TABLE XXI.

Question 9. Are there Subjects in your Course which you regard as having value for you personally? Afrikaans indicated.

STD	GIRLS	BOYS	TOTAL
VI	15	18	33
VII	12	11	23
VIII	4	11	15
TOTAL	31	40	71

TABLE XXII.

Question 10. Are there subjects in your course which you find altogether too difficult to master?
Afrikaans indicated.

STD	GIRLS	BOYS	TOTAL
VI	0	9	9
VII	1	0	0
VIII	0	0	0
TOTAL	1	9	10

TABLE XXIII.

Question 11. Are there subjects in your course in which your achievements are satisfactory?
Afrikaans indicated.

STD	GIRLS	BOYS	TOTAL
VI	17	19	36
VII	12	11	23
VIII	4	13	17
TOTAL	33	43	76

Summarising the indications of these tables it is evident that 40.5% of the Afrikaans speaking pupils like Afrikaans best, 11.7% like it least, 9% regard it as of no value, 63% regard it as being of value, 9% find it too difficult to master and 68.4% are satisfied with their achievements in Afrikaans.

(c) Examination Achievement, 1957.

Std. VI

TABLE XXIV.

Distribution of Examination Marks (Percentages)
of Case-group in Afrikaans (First Language)

Marks in Percentages Class Interval = 5	f
35 - 39	3
40 - 44	6
45 - 49	16
50 - 54	12
55 - 59	10
60 - 64	8
65 - 69	3

$$N = 58$$

$$A.M. = 52.6$$

$$\text{Median} = 51.7$$

$$\text{Mode} = 47.5$$

$$\sigma = 6.65$$

$$\sigma_{A.M.} = .87$$

Not a single Afrikaans speaking pupil failed in the examination in his mother-tongue, Afrikaans, First Language, at the Std. VI level. In addition the average achievement is remarkably high with 11 pupils or 18.9% gaining over 60% in the examination and 33 i.e. 56% of the class obtaining over 50%.

Std. VII. TABLE XXV.

Distribution of Examination Marks (Percentages) of Case-group in Afrikaans (First Language)

Marks in Percentages Class Interval = 5	f
30 - 34	3
35 - 39	2
40 - 44	7
45 - 49	4
50 - 54	6
55 - 59	1
60 - 64	2

$$N = 25$$

$$A.M. = 46.3$$

$$\text{Median} = 45.6$$

$$\text{Mode} = 42.5$$

$$\sigma = 8$$

$$\sigma_{A.M.} = 1.6$$

At the Std. VII level 2 pupils i.e. 8% of the Afrikaans speaking group failed in the Afrikaans, First Language examination. With 92% passes and

two pupils gaining over 60% the standard of success set in Std. VI in this subject was well maintained.

Std. VIII.

In the Junior Certificate examinations of 1957, the 28 Afrikaans speaking pupils in Std. VIII in our case-group obtained the following symbols for Afrikaans, First Language:

<u>Symbol</u>	<u>Number of Pupils</u>
C (60 - 69%)	1
D (50 - 59%)	10
E (40 - 49%)	14
F ($33\frac{1}{3}$ - 39%)	3
TOTAL	28

This means that there was not a single failure in the group and that 11 pupils out of 28 attained over 50% in the examination.

The percentage of passes in Afrikaans, First Language, in the Junior Certificate Examination in 1957 for the Province was 99 according to the Report of the S. G. E. for 1957 (p.61).

(d) The Effect of Repeat-years on Achievement in Afrikaans, First Language:

There were only 9 pupils in the Afrikaans First Language group in Std. VI who were doing repeat years. The differences in performances were as follows (expressed as percentage marks):

<u>Pupil</u>	<u>1st Year</u>	<u>2nd Year</u>	<u>Difference.</u>
L.W.	49	46	- 3
F.V.	37	45	+ 8
A.B.	43	48	+ 5
J.P.	42	44	+ 2
M.B.	49	62	+13
J.B.	48	60	+12
J.M.	35	49	+14
C.B.	38	55	+17
H.M.	46	50	+ 4

When noting that there is only one case with a lower performance in the second than in the first year and that the improvements range from 2% to 17% it may be as well to note that there were no failures in this subject either in the first, or in the second year.

3. English, Second Language:

English, as second language was studied by the Afrikaans speaking pupils in the group who studied Afrikaans as First Language.

(a) Aims:

The following are named as desirable objectives to be achieved during the three-year course:

(i) Pupils should be able to understand the spoken language clearly.

(ii) They should be able to speak simple English correctly and with ease and confidence.

(iii) They should be able to read with pleasure and understanding passages which are not beyond their mental development.

(iv) They should be able to write more advanced English correctly.

(b) Pupils Evaluation:

Pupils were requested to leave the second language out of reckoning when answering the relevant six questions of the Questionnaire on subject evaluation. This request was made in view of the fact that pupils' attitude towards the 2nd language may be very seriously effected by factors other than educational or scholastic. The evaluation of the 2nd language would under such circumstances be on a totally different basis than that applying to the other subjects.

Consequently there were no responses involving the second language, either English or Afrikaans, in the Questionnaire.

(c) Examination Achievements:

TABLE XXVI.

Std. VI. Distribution of Examination Marks (Percentage)
of Case-group in English (Second Language)

Marks in Percentages Class Interval = 5	f
25 - 29	3
30 - 34	8
35 - 39	11
40 - 44	8
45 - 49	5
50 - 54	8
55 - 59	5
60 - 64	3

$$N = 51$$

$$A.M. = 43.6$$

$$\text{Median} = 42.2$$

$$\text{Mode} = 37.8$$

$$\sigma = 8.57$$

$$\sigma_{A.M.} = 1.2$$

There were 8 failures in the group i.e. 15.6%;
at the same time 31% of the group obtained more than
50% and 3 pupils obtained more than 60% in the exami-
nation in their second language.

1. Seven pupils did not write the examination in
this subject, hence the difference in the numbers
between Afrikaans (First Language) and English (Second
Language).

TABLE XXVII.

Std. VII. Distribution of Examination Marks (Percentages) of Case-group in English (Second Language).

Marks in Percentages Class Interval = 5	f
30 - 34	6
35 - 39	7
40 - 44	4
45 - 49	2
50 - 54	5
55 - 59	1

$$N = 25$$

$$A.M. = 41.7$$

$$\text{Median} = 39.6$$

$$\text{Mode} = 37.5$$

$$Q = 7.85$$

$$\sigma_{A.M.} = 1.57$$

Four pupils i.e. 16% failed to reach pass-marks but at the same time 6 pupils obtained more than 50% in their English (Second Language) examination at Std. VII level.

Std. VIII:

In the Junior Certificate examination of 1957, the 28 Afrikaans speaking pupils in Std. VIII in our case-group obtained the following symbols for English, Second Language:

<u>Symbol</u>	<u>Number of Pupils</u>
D (50 - 59%)	3
E (40 - 49%)	7
F ($33\frac{1}{3}$ - 39%)	12
FF (30 - 33%)	4
G (20 - 29%)	2
TOTAL	28

With six pupils i.e. 21.4% failing and only 3 pupils attaining over 50% this achievement is less satisfactory than at the Std. VI and VII levels. The percentage pass for the Province for this examination in English, Second Language, was 86 i.e. 7.6% higher than the achievement of our group.

(d) Effect of Repeat-Years on Achievement in English, Second Language.

There were only 9 pupils who offered English, Second Language, as a subject, who were doing a repeat-year in Std. VI.

The differences in performances were as follows (expressed as percentages)

<u>Pupil</u>	<u>1st Year</u>	<u>2nd Year</u>	<u>Difference.</u>
L.W.	33	39	+ 6
F.V.	33	37	+ 4
A.B.	48	60	+ 12
J.P.	34	41	+ 7
M.B.	49	44	- 5
J.B.	30	48	+ 18
J.M.	38	39	+ 1
C.B.	32	41	+ 9
H.N.	27	45	+ 18

One pupil's achievement deteriorated by 5% while the performances of the remaining eight pupils improved from 1% to 18%. There were 3 failures with 2 more on the borderline in the 1st year. In the second year there were no failures. Even so there were no improvements and with one exception no pupil reached 50%.

4. Afrikaans, Second Language:

Afrikaans as Second Language was studied by the English speaking pupils in the group who studied English as First Language.

(a) Aims:

The aims, both general and specific, were exactly the same as set out for English as Second Language.

(b) Pupils Evaluation:

On account of the existence of the conditions outlined in respect of English, Second Language, there were no responses involving Afrikaans as Second Language in the Questionnaire.

(c) Examination Achievement:

TABLE XXVIII.

Std. VI. Distribution of Examination Marks (Percentages) of Case-group in Afrikaans (Second Language).

Marks in Percentages Class Interval = 5	f
15 - 19	1
20 - 24	3
25 - 29	8
30 - 34	3
35 - 39	7
40 - 44	6
45 - 49	4
50 - 54	5
55 - 59	2
60 - 64	2

N = 41

A.M. = 39.4

Median = 38.9

Mode = 27.5

σ = 12.04

σ A.M. = 1.8

Out of 41 Pupils of our group who studied Afrikaans as Second Language, 14 or 34.1% failed in this subject at the Std. VI level. Nine pupils scored more than 50% including 2 with scores of over 60%.

TABLE XXIX.

Std. VII. Distribution of Examination Marks (Percentages)
of Case-group in Afrikaans (Second Language.)

Marks in Percentages Class Interval = 5	f
25 - 29	4
30 - 34	5
35 - 39	8
40 - 44	15
45 - 49	10
50 - 54	8
55 - 59	2
60 - 64	1
65 - 69	1
70 - 74	1

$$N = 55$$

$$A.M. = 43.9$$

$$\text{Median} = 43.5$$

$$\text{Mode} = 42.5$$

$$\sigma = 9.45$$

$$\sigma_{A.M.} = 1.27$$

At the Std. VII level 6 pupils out of 55 i.e. 10.9% of the English speaking group failed to pass in Afrikaans as Second Language. 13 Pupils or 23.6% of the group obtained more than 50% in the examination.

Std. VIII.

The number of pupils from the group who offered this subject for the Junior Certificate Examination was too small to reveal any significant tendencies.

(d) Effect of Repeat-years on Achievement in Afrikaans as Second Language:

There were nineteen pupils with Afrikaans as Second Language repeating Std. VI. The differences between the two performances were as follows:

<u>1st Year</u>	<u>2nd Year</u>	<u>Difference.</u>
48	53	+ 5
30	29	- 1
19	26	+ 7
31	32	+ 1
42	45	+ 3
37	27	- 10
71	51	- 20
18	20	+ 2
40	25	- 15
45	44	- 1
55	59	+ 4
47	44	- 3
31	31	+ 0
50	44	- 6
47	50	+ 3
26	44	+ 18
36	32	- 4
34	48	+ 14
36	49	+ 13

The above list shows that 10 pupils i.e. 52.6% improved their scores in the second year with 1% to 18%. Of the 10 who improved, 3 who failed in this

subject in the first year also failed in the second attempt. Only one who failed in the first year improved sufficiently to pass the subject at the second attempt.

One pupil scored 31% at each attempt, i.e. just short of the pass mark.

Eight pupils i.e. 42% obtained lower scores at the second attempt, 3 of these to such an extent that they failed at the second attempt although they passed at the first attempt.

From these figures it is obvious that the repeat-year did not produce any substantial improvement in the group's achievements in Afrikaans as Second Language.

5. Social Studies:

(a) Aims:

Two sets of aims are given in the official publications; aims for the composite course and aims for the integrated course. These aims could be combined because in reality there is only a difference of emphasis. They could then be summarised as follows:

(i) To transmit to the pupil the heritage of the past.

(ii) To develop in the child the understanding of the story of his own country and of the conducting of public affairs.

(iii) To enrich his life by increasing his general knowledge about people, places and events.

(iv) To develop the methodology of dealing with this subjects and its conclusions.

(v) To give the child a clear idea of himself as an individual

(1) living in a community of people,

(2) living in a country in which he has to take his place as a citizen,

(3) living in a world shaped by the past and continually changing.

(vi) To establish healthy human relationships.

(vii) To bring each pupil to his fullest development as a social being.

(b) Pupils Evaluation:

The following tables reveal the evaluation of and attitude towards Social Studies as expressed by the pupils in our case-group in their answers to the relevant six questions of the Questionnaire.

TABLE XXX

Question 6: Which Subjects in your Course do you like best? Social Studies indicated.

See page 202.

STD	GIRLS	BOYS	TOTAL
VI	15	13	28
VII	11	11	22
VIII	2	8	10
TOTAL	28	32	60

TABLE XXXI.

Question 7. Which Subjects in your Course do you like least? Social Studies indicated.

STD	GIRLS	BOYS	TOTAL
VI	14	22	36
VII	12	12	24
VIII	6	8	14
TOTAL	32	42	74

TABLE XXXII

Question 8. Are there Subjects in your Course which you regard as of no value? Social studies indicated.

See page 203.

STD	GIRLS	BOYS	TOTAL
VI	10	23	33
VII	13	11	24
VIII	6	14	20
TOTAL	29	48	77

TABLE XXXIII.

Question 9. Are there Subjects in your Course which you regard as having value for you personally? Social Studies Indicated.

STD	GIRLS	BOYS	TOTAL
VI	6	5	11
VII	5	7	12
VIII	1	5	6
TOTAL	12	17	29

TABLE XXXIV.

Question 10. Are there Subjects in your Course which you find altogether too difficult to master? Social Studies indicated.

STD	GIRLS	BOYS	TOTAL
VI	5	7	12
VII	8	1	9
VIII	2	4	6
TOTAL	15	12	27

TABLE XXXV.

Question 11. Are there subjects in your Course in which your achievements are satisfactory? Social Studies indicated.

STD	GIRLS	BOYS	TOTAL
VI	15	8	23
VII	8	13	21
VIII	1	8	9
TOTAL	24	29	53

Summarising the pupils' indications reflected in the above tables we find that 27.3% of our group prefer Social Studies to the rest of their school subjects; 33.6% like it least of their subjects; 35% regard it as of no value; 13.2% regard it as having value for them personally; 12.3 find it al-

together too difficult to master and 24% are satisfied with their achievements in Social Studies.

(c) Examination Achievements, 1957:

TABLE XXXVI.

Std. VI. Distribution of Examination Marks (Percentages) of Case-group in Social Studies.

Marks in Percentages Class Interval = 5	f
5 - 19	2
10 - 14	2
15 - 19	6
20 - 24	9
25 - 29	10
30 - 34	17
35 - 39	20
40 - 44	10
45 - 49	12
50 - 54	6
55 - 59	3
60 - 64	1
65 - 69	2

N = 100

A.M. = 36

Median = 36

Mode = 37.5

σ = 12.35

$\sigma_{A.M.}$ = 1.235

Although 23 pupils from Std. VI indicated their satisfaction with their achievements in Social Studies there do not seem to be much ground for satisfaction with the achievements reflected in the frequency distribution table above. The averages, A.M. Median and the Mode are only just above the pass-mark. 39 Pupils out of the 100 in Std. VI failed in this subject and of the 61 who managed to attain the pass-mark only 12 obtained more than 50%.

TABLE XXXVII.

Std. VII: Distribution of Examination Marks (Percentages) of Case-group in Social Studies.

Marks in Percentages Class Interval = 5	f
5 - 99	1
10 - 14	0
15 - 19	1
20 - 24	3
25 - 29	12
30 - 34	16
35 - 39	13
40 - 44	19
45 - 49	7
50 - 54	4
55 - 59	1
60 - 64	2
65 - 69	1

N = 80
 A.M. = 37.9
 Median = 37.7
 Mode = 42.5
 σ = 10.45
 σ A.M. = 1.16

Out of 80 pupils 21 i.e. 26%, failed in Social Studies at the Std. VII level which is a considerably better achievement than the 39% failures at the Std. VI level. The averages continue to be low and do not warrant the satisfaction with their social studies achievements expressed by 23 pupils in Std. VII under question 11 of the Questionnaire. Only 8 pupils or 10%, i.e. less than in Std. VI, attained a higher mark than 50%.

Std. VIII.

At the Junior Certificate Examination in 1957 the following symbols were obtained in Social Studies by 35 Std. VIII pupils from our group:

<u>Symbols</u>	<u>Number of Pupils.</u>
C (60 - 69%)	2
D (50 - 59%)	8
E (40 - 49%)	16
F ($33\frac{1}{3}$ - 39%)	3
FF (30 - 33%)	3
G (20 - 29%)	3

This indicates an appreciable lower incidence of failing i.e. 17% as against 26% at the Std. VII

and 39% at the Std. VI stage.

The percentage of passes in the Junior Certificate Examination in Social Studies, for the Province as a whole were 94 (Integrated Course) and 92 (Composite Course)⁽¹⁾

(d) The Effect of Repeat-Years on Achievement in Social Studies:

There were 29 pupils with Social Studies as a subject, repeating Std. VI.

The differences between performances in the first and second year were as follows (Marks expressed as percentages)

<u>Pupil</u>	<u>1st Year</u>	<u>2nd Year</u>	<u>Difference.</u>
L.W.	42	29	+ 13
F.V.	25	34	+ 9
C.A..	29	52	+ 23
J.W.	52	52	0
M.U.	32	31	- 1
M.H.	11	39	+ 28
A.R.	27	49	+ 22
E.W.	25	38	+ 13
M.D.	29	42	+ 13
F.B.	46	18	- 28
A.R.	29	16	- 13
K.G.	24	29	+ 5

1. For the purpose of this study these two courses were treated as one. In some schools represented in the case-group the Integrated Course is followed and in others, the Composite Course.

<u>Pupil</u>	<u>1st Year</u>	<u>2nd Year</u>	<u>Difference.</u>
A.B.	35	19	- 16
E.H.	20	27	+ 7
J.P.	34	32	- 2
J.G.	13	34	+ 21
H.G.	50	46	- 4
P.N.	21	40	+ 19
R.S.	24	37	+ 13
M.B.	25	40	+ 15
J.B.	34	37	+ 3
J.M.	24	28	+ 4
G.B.	40	45	+ 5
A.C.	21	30	+ 9
J.B.	32	61	+ 29
E.N.	31	25	- 6
T.P.	46	37	- 9
C.B.	18	37	+ 19
H.N.	38	51	+ 13

Nineteen pupils improved their performances by scores ranging from 4% to 29%.

Of these, 12 who had failed in the first year, passed at the second attempt and 4, although improving, failed at both attempts.

Nine pupils i.e. 31% obtained lower marks at the second attempt than in their first year. Four of these had actually passed in this subject in the first year but failed in the second year. The decreases range from 1% to 28%.

One pupil attained the same score i.e. 52% in both years.

The improvements took place within very narrow limits. In the first year's list there are only two scores and in the second year's list three scores of 50% and over.

6. General Science:

(a) Aims:

These are given as follows in the official publication, E 321:

"(i) To arouse the interest of the pupils in the laws of nature.

(ii) To explain to them the influence of scientific knowledge on the development of modern civilization.

(iii) To provide the pupils with an introduction to scientific methods of thought and investigation.

(iv) To bring pupils into contact with possible interests and to enable pupils to make an enlightened choice of subjects for further study or a vocation."

(b) Pupils Evaluation:

The following tables reveal the evaluation of and attitude towards General Science of the pupils in the case-group.

TABLE XXXVIII.

Question 6. Which Subjects in your Course do you like best? General Science Indicated.

STD	GIRLS	BOYS	TOTAL
VI	10	18	28
VII	9	13	22
VIII	2	8	10
TOTAL	21	39	60

TABLE XXXIX.

Question 7. Which Subjects in your Course do you like least? General Science Indicated.

STD	GIRLS	BOYS	TOTAL
VI	15	13	28
VII	11	10	21
VIII	10	6	16
TOTAL	36	29	65

TABLE XL.

Question 8. Are ther Subjects in your Course which you regard as of no value? General Science Indicated.

STD	GIRLS	BOYS'	TOTAL
VI	15	5	20
VII	8	8	16
VIII	2	4	6
TOTAL	25	17	42

TABLE XLI.

Question 9. Are ther Subjects in your Course which you regard as having value for you personally? General Science Indicated.

STD	GIRLS	BOYS	TOTAL
VI	4	12	16
VII	5	11	16
VIII	0	13	13
TOTAL	9	36	45

TABLE XLII.

Question 10. Are there Subjects in your Course which you find altogether too difficult to master? General Science indicated.

STD	GIRLS	BOYS	TOTAL
VI	4	8	12
VII	9	2	11
VIII	6	2	8
TOTAL	19	12	31

TABLE XLIII.

Question 11. Are there Subjects in your Course in which your achievements are satisfactory? General Science indicated?

STD	GIRLS	BOYS	TOTAL
VI	5	12	17
VII	9	13	22
VIII	2	11	13
TOTAL	16	36	52

When analysing the pupils' indications as reflected in the above tables it must be borne in mind that all the pupils in the case-group included General Science in their Course.

It appears that 27% of the entire group like General Science best of all their subjects, 29.5% like it least; 19% regard it as of no value; 20% regard it as a subject having value for them personally; 14% find it altogether too difficult to master and 23.6% feel that their achievements in this subject are satisfactory.

(c) Examination Achievements, 1957.

TABLE XLIV.

Std. VI. Distribution of Examination Marks (Percentages) of Case-group in General Science.

Marks in Percentages Class Interval = 5	f
5 - 9	1
10 - 14	6
15 - 19	4
20 - 24	6
25 - 29	12
30 - 34	14
35 - 39	13
40 - 44	13
45 - 49	17
50 - 54	2
55 - 59	3
60 - 64	5
65 - 69	4

$N = 100$
 $A.M. = 37.8$
 $Median = 37.7$
 $\sigma = 13.95$
 $\sigma A.M. = 1.395$

There were 40 failures at the Std. VI level; the worst achievement in the subjects discussed up to this stage. At the same time there were 14 pupils who scored higher than 50% and 9 of these passed the 60% mark. At the same time 11% scored less than 20%. The mean and median is only just above the pass-mark of $33\frac{1}{3}\%$.

TABLE XLV.

Std. VII. Distribution of Examination Marks (Percentages) of Case-group in General Science.

Marks in Percentages Class Interval = 5	f
10 - 14	6
15 - 19	3
20 - 24	3
25 - 29	15
30 - 34	11
35 - 39	14
40 - 44	10
45 - 49	9
50 - 54	5
55 - 59	2
60 - 64	2

N = 80
 A.M. = 35.56
 Median = 35.7
 σ = 12.1
 σ A.M. = 1.35

There were 36 failures i.e. 45%, in this subject at the Std. VII level; a lower standard of achievement even than that reached at the Std. VI level. Nine pupils scored higher than 50% but at the other end of the scale, the same number i.e. 11% of the group scored less than 20%.

Std. VIII.

At the Junior Certificate examination of 1957 the following results were attained by 35 pupils from our group, in General Science:

<u>Symbols</u>	<u>Number of Pupils.</u>
D (50 - 59%)	5
E (40 - 49%)	9
F ($33\frac{1}{3}$ - 39%)	9
FF (30 - 33%)	7
∩ (20 - 29%)	5

Of a total of these 35 pupils, 12 failed i.e. 34.3%. Only 5 pupils or 14% attained scores of 50% and over and none attained 60%.

The percentage pass in this subject for the Province was 95%.

(d) Effect of Repeat-Years on Achievement
in General Science:

Twenty-eight of the pupils repeating Std. VI offered General Science as a subject.

The differences between performances in the first and second years were as follows:

<u>1st Year</u>	<u>2nd Year</u>	<u>Difference.</u>
34	48	+ 14
30	49	+ 19
31	34	+ 3
43	24	- 19
14	26	+ 12
26	34	+ 8
42	32	- 10
25	19	- 6
36	29	- 7
29	23	- 6
30	35	+ 5
40	47	+ 7
48	28	- 20
22	39	+ 17
34	65	+ 31
19	42	+ 23
49	57	+ 8
27	41	+ 14
34	44	+ 10
27	39	+ 12
34	39	+ 5
34	67	+ 33
21	21	0

<u>1st Year</u>	<u>2nd Year</u>	<u>Difference.</u>
5	26	+ 21
11	21	+ 10
28	32	+ 4
34	36	+ 2

Twenty pupils improved their scores in the second year with a range from 3% to 33%. Of these, eight who failed in the first year passed in the second while four failed at both attempts.

One pupil failed in both years on the same score.

Of seven pupils who obtained lower scores in the second year, five who have passed in the first year failed in the second and two failed in both years.

Again, the improvements, such as there were, took place within very narrow limits. In the second year there are three scores of over 50% and none in the first year.

7. General Mathematics:

(a) Aims:

"(i) To develop further the pupils' skill in calculation."

"(ii) To train pupils in accuracy in calculation and measurement."

"(iii) To develop in them an insight into and a conception of mathematical principles, and thereby to assist them in solving mathematical problems which confront them in everyday life."

"(iv) To prepare them for the making of calculations which they may require as well as in connection with the work which they may undertake if they should leave school at this stage."

"(v) To enable them to cultivate a logical way of thinking."

(b) Pupils Evaluation:

The following tables indicate the evaluation and attitude towards General Mathematics of the pupils of our case-group as revealed in the relevant six questions of the Questionnaire.

TABLE XLVI.

Question 6. Which Subjects in your Course do you like best? Mathematics Indicated.

STD	GIRLS	BOYS	TOTAL
VI	2	9	11
VII	1	18	19
VIII	1	2	3
TOTAL	4	29	33

TABLE XLVII.

Question 7. Which Subject in your Course do you like least? Mathematics Indicated.

STD	GIRLS	BOYS	TOTAL
VI	29	23	52
VII	24	25	49
VIII	0	11	11
TOTAL	53	59	112

TABLE XLVIII.

Question 8. Are there subjects in your Course which you regard as of no value? Mathematics Indicated.

STD	GIRLS	BOYS	TOTAL
VI	1	1	2
VII	6	4	10
VIII	0	1	1
TOTAL	7	6	13

TABLE XLIX

Question 9. Are there Subjects in your Course which you regard as having value for you personally? Mathematics Indicated.

STD	GIRLS	BOYS	TOTAL
VI	9	17	26
VII	6	16	22
VIII	1	6	7
TOTAL	16	39	55

TABLE L

Question 10. Are there Subjects in your Course which you find altogether too difficult to master? Mathematics Indicated.

STD	GIRLS	BOYS	TOTAL
VI	20	33	53
VII	25	22	47
VIII	0	12	12
TOTAL	45	67	112

TABLE LI.

Question 11. Are there Subjects in your Course in which your achievements are satisfactory? Mathematics Indicated.

STD	GIRLS	BOYS	TOTAL
VI	8	7	15
VII	2	7	9
VIII	0	3	3
TOTAL	10	17	27

According to the attitudes reflected in these tables by the 195 pupils in the case-group studying mathematics, 17% like General Mathematics better than their other subjects; 57% like it least; 7% regard it as being of no value; 28% regard it as having value for them personally; 57% find it too difficult to master and 14% are satisfied with their achievements in General Mathematics.

(c) Examination Achievements, 1957.

TABLE LII.

Std. VI. Distribution of Examination Marks (Percentages) in Case-group in General Mathematics.

Marks in Percentages Class Interval = 5	f
5 - 9	4
10 - 14	7
15 - 19	9
20 - 24	18
25 - 29	12
30 - 34	11
35 - 39	15
40 - 44	7
45 - 49	5
50 - 54	5
55 - 59	4
60 - 64	3

$$N = 100$$

$$A.M. = 31.45$$

$$\text{Median} = 30$$

$$\sigma = 13.71$$

$$\sigma A.M. = 1.37$$

Fifty-nine percent of our group failed in general mathematics at the Std. VI level. Twenty of the group scored less than 20% and 12 pupils scored over 50%.

The mean as well as the median for the group are lower than $33\frac{1}{3}\%$.

TABLE LIII.

Std. VII. Distribution of Examination Marks (Percentages) in Case-group in General Mathematics.

Marks in Percentages Class Interval = 5	f
5 - 9	2
10 - 14	8
15 - 19	20
20 - 24	11
25 - 29	13
30 - 34	9
35 - 39	10
40 - 44	4
45 - 49	2
50 - 54	0
55 - 59	0
60 - 64	1

$$N = 80$$

$$A.M. = 25.8$$

$$\text{Median} = 24.54$$

$$\sigma = 10.6$$

$$\sigma_{A.M.} = 1.18$$

Out of the 80 case-group pupils in Std. VII, 61 pupils i.e. 76.25% failed at the Std. VII level. Thirty pupils i.e. 37.5% scored less than 20% and only 1 pupil out of the group of 80 reached a score of more than 50%.

Std. VIII.

At the Junior Certificate Examination, 1957, in General Mathematics, 15 pupils from the Std. VIII section of our group attained the following symbols:

<u>Symbols</u>	<u>Number of Pupils.</u>
E (40 - 49%)	2
F ($33\frac{1}{3}\%$ - 39%)	2
FF (30 - 33%)	0
G (20 - 29%)	7
H (Less than 20%)	4

Out of the group of fifteen, only 4 pupils passed attaining E and F symbols. Even in this small number the percentage failing was 73.3%. The percentage passes were therefore 26.7% as against the 83% passes in General Mathematics for the whole of the Province in the Junior Certificate Examination of 1957.

(d) The Effect of Repeat-Years on Achievement in General Mathematics:

Twenty-nine pupils in Std. VI of our group who were doing a repeat-year, offered general mathematics as a subject.

<u>1st Year</u>	<u>2nd Year</u>	<u>Difference.</u>
24	39	+ 15
37	55	+ 18
20	21	+ 1
9	14	+ 5
10	26	+ 16
3	6	+ 3
15	36	+ 21
24	24	0
26	25	- 1
23	21	- 2
36	18	- 18
9	13	+ 4
29	34	+ 5
61	57	- 4
27	35	+ 8
31	54	+ 23
29	20	- 9
8	12	+ 4
49	57	+ 8
12	38	+ 26
8	36	+ 28
24	32	+ 8
42	20	- 22
24	60	+ 36
33	18	- 15
30	8	- 22
52	34	- 18
22	44	+ 22
18	44	+ 26

Nineteen pupils improved their performances in the second year by from 1% to 36%. Of 17 out of this improved group who failed in the first year, 10 passed at the second attempt and 7 failed again in spite of the improvement.

One pupil had the same score in both years, failing each time.

Of the 9 pupils who obtained lower marks at the second attempt, 3 have passed in the first year but failed in the second and 4 failed at both attempts.

The improvements although high in individual percentages e.g. a pupil improved from 8% to 36% are all within a limited range. The score of 60 occur only twice, once in the first and once in the second year.

8. Business Methods and Bookkeeping:

(a) Aims:

(i) To give pupils a better insight into everyday commercial affairs with which they will come in contact later.

(ii) To give pupils an opportunity to investigate commercial facilities in their neighbourhood and to understand principles of commerce.

(iii) To encourage neatness and accuracy.

(iv) To provide a background for those pupils who wish to continue their studies as well as to those who may leave at the end of the course.

(b) Pupils' Evaluation:

The following tables reveal the evaluation of and attitudes towards this subject of 187 pupils from our case-group who included Business Methods and Bookkeeping in their Course.

TABLE LIV.

Question 6. Which Subject in your Course do you like best? Business Methods and Bookkeeping indicated.

STD	GIRLS	BOYS	TOTAL
VI	19	13	32
VII	11	9	20
VIII	3	3	6
TOTAL	33	25	58

TABLE LV.

Question 7. Which Subjects in your Course do you like least? Business Methods and Bookkeeping Indicated.

STD	GIRLS	BOYS	TOTAL
VI	5	7	12
VII	9	8	17
VIII	1	4	5
TOTAL	15	19	34

TABLE LVI.

Question 8. Are there subjects in your Course which you regard as of no value? Business Methods and Bookkeeping Indicated.

STD	GIRLS	BOYS	TOTAL
VI	3	5	8
VII	2	7	9
VIII	0	0	0
TOTAL	5	12	17

TABLE LVII.

Question 9. Are there Subjects in your Course which you regard as having value for you personally? Business Methods and Bookkeeping Indicated.

STD	GIRLS	BOYS	TOTAL
VI	26	13	39
VII	17	12	29
VIII	11	7	18
TOTAL	54	32	86

TABLE LVIII.

Question 10. Are there subjects in your Course which you find altogether too difficult to master? Business Methods and Bookkeeping Indicated.

STD	GIRLS	BOYS	TOTAL
VI	7	8	15
VII	6	7	13
VIII	0	1	1
TOTAL	13	16	29

TABLE LIX

Question 11. Are there Subjects in your Course in which your Achievements are satisfactory? Business Methods and Bookkeeping Indicated.

STD	GIRLS	BOYS	TOTAL
VI	11	17	28
VII	8	10	18
VIII	2	10	12
TOTAL	21	37	58

Summarising the attitudes reflected in the answers to these questions, we find that 31% of those pupils of our case-group who studied it like Business Methods and Bookkeeping best; 18% like it least; 9% regard it as of no value; 46% regard it as having value for them personally; 15.6% find it altogether too difficult to master and 31% are satisfied with their achievements in this subject.

(c) Examination Achievements, 1957:

TABLE LX.

Std. VI. Distribution of Examination Marks (Percentages) of Case-group in Business Methods and Bookkeeping.

Marks in Percentages Class Interval = 5	f
5 - 9	2
10 - 14	3
15 - 19	6
20 - 24	9
25 - 29	10
30 - 34	10
35 - 39	10
40 - 44	11
45 - 49	8
50 - 54	12
55 - 59	3
60 - 64	7

$$N = 91$$

$$A.M. = 37.6$$

$$\text{Median} = 37.6$$

$$\sigma = 14.3$$

$$\sigma_{A.M.} = 1.49$$

Thirty-eight pupils i.e. 41.7% of the group failed at the Std. VI level. The averages are just above pass-mark.

Eleven pupils or 12% scored less than 20% but 22 i.e. 24% scored over 50%.

TABLE LXI.

Std. VII. Distribution of Examination Marks (Percentages) of Case-group in Business Methods and Bookkeeping.

Marks in Percentages Class Interval = 5	f
5 - 9	2
10 - 14	2
15 - 19	4
20 - 24	7
25 - 29	3
30 - 34	9
35 - 39	12
40 - 44	12
45 - 49	6
50 - 54	4
55 - 59	3
60 - 64	4

$$N = 68$$

$$A.M. = 37.1$$

$$\text{Median} = 37.9$$

$$\sigma = 13.4$$

$$\sigma_{A.M.} = 1.6$$

The averages remained about the same as for Std. VI. Twenty-five pupils i.e. 36.7% failed at the Std. VII level.

Eight pupils or 11.7% obtained scores of lower than 20% and 11 pupils or 16% obtained more than 50%.

Std. VIII.

At the Junior Certificate Examination 1957, twenty-eight pupils from our group offered this subject with the following results:

<u>Symbols</u>	<u>Number of Pupils.</u>
C (60 - 69%)	3
D (50 - 59%)	4
E (40 - 49%)	11
F ($33\frac{1}{2}$ - 39%)	6
FF (30 - 33%)	3
G (20 - 30%)	1

With four pupils of 14.3% failing this leaves 85.7% passes as against 96% passes in this subject for the whole Province in Junior Certificate Examination, 1957.

(e) The Effect of Repeat-Years on Achievement in Business Methods and Bookkeeping.

Twenty-eight pupils who repeated Std. VI had Business Methods and Bookkeeping as a subject. Their performances in the two attempts were as follows:

<u>1st Year</u>	<u>2nd Year</u>	<u>Difference.</u>
20	64	+ 44
13	70	+ 52
53	26	+ 32
51	14	+ 37
38	9	+ 29
16	15	- 1
36	54	+ 18
22	22	0
30	49	+ 19
55	32	- 23
40	49	+ 9
32	34	+ 2
14	32	+ 18
32	54	+ 22
37	46	+ 9
34	43	+ 9
51	62	+ 11
35	62	+ 27
38	57	+ 19
9	44	+ 35
17	51	+ 34
35	32	- 3
36	60	+ 24
18	39	+ 21
29	34	+ 5

<u>1st Year</u>	<u>2nd Year</u>	<u>Difference.</u>
24	38	+ 14
28	70	+ 42
40	20	- 20

Of twenty pupils from the above group who improved their performances at the second attempt, 11 who failed in the first year improved to such an extent that they passed at the second attempt. One improved but failed at both attempts.

One pupil failed on the same score at both attempts.

Of the seven pupils who obtained lower marks at the second attempt, six have passed in the first year but failed in the second year.

A feature of the improvements in this subject was that it was very substantial in at least 10 cases. In these cases the second performance is over 50% or 60%; and in two cases, 70%. These performances seem to indicate that in this subject substantial improvement can be brought about in some cases; improvements which indicate that the pupils have acquired a good grasp of the subject in the second year. In the other subjects with which we have dealt, there were very often spectacular percentage improvement such as from 8% to 40% but then 40% is still a low score. In the case of the ten pupils mentioned above, however, their second attempt put them into a much higher performance category in this subject.

9. Practical Subjects:

The subjects Woodwork, Needlework, Domestic Science and Typing are grouped together here under the heading "practical subjects" for the sake of convenience of treatment. These subjects are not taught on a vocational basis; that would be the prerogative of the institutions of the Junior Education Department.

On account of the distribution of the pupils of the case-group in these subjects and in the three different classes the numbers in each group are not sufficient to allow for the same schedule of description and analysis which were followed in respect of the other subjects.

Consequently only the aims as published and the examination achievements of 1957 will be discussed in respect of the four subjects mentioned.

Woodwork:

(a) Aims.

"(i) To give pupils a knowledge of industrial processes and materials."

"(ii) To give a vocational bias to education and consequently a broader view of life."

"(iii) To bridge the gap between school and life."

"(iv) To develop manipulative skill; to give mastery over tools; to enlarge knowledge and use of materials and to develop general handiness."

"(v) To develop confidence in overcoming difficulties and to give knowledge and experience for emergencies."

"(vi) To inculcate habits of order, exactness and cleanliness."

"(vii) To train in habits of attention, industry and perseverance."

"(viii) To instil a love of honest and hard work."

The writer had no intention to discuss these specific aims as they were published with the different subjects. In this case, however, it is necessary to point out certain facts to the reader who may otherwise put a wrong interpretation on the examination results to be discussed in the next few pages. Points (i), (ii) and (iii) from the aims given above could possibly be included in a list of aims in the teaching of carpentry at a technical school; as aims for the teaching of woodwork in the junior secondary course, these could at the best represent wishful thinking, i.e. under the system of divided control of education. The training given in woodwork in the junior secondary course is not vocational or pre-apprenticeship training and it was never intended to be that. It is an educational handicraft subject, pure and simple.

The last four aims could just as well apply to any other subject in the Course.

Aim No. 4 expresses more than any other, the true value ascribed to and the position occupied by woodwork in the Junior Secondary Course.

(b) Examination Achievements, 1957.TABLE LXII.

Std. VI. Distribution of Examination Marks (Percentages) of Case-group in Woodwork.

Marks in Percentages Class Interval = 5	f
25 - 29	5
30 - 34	2
35 - 39	2
40 - 44	7
45 - 49	4
50 - 54	5
55 - 59	6
60 - 64	0
65 - 69	3
70 - 74	1
75 - 79	0
80 - 84	0
85 - 89	1

$$N = 36$$

$$A.M. = 48.2$$

$$\text{Median} = 47.5$$

$$O = 13.57$$

$$O.A.M. = 2.26$$

There were six pupils i.e. 16.6% who failed in

Woodwork at the Std. VI level. There were no scores under 20%.

Sixteen pupils i.e. 44% attained scores of over 50% including one over 80%.

TABLE LXIII.

Std. VII. Distribution of Examination Marks (Percentages) of Case-group in Woodwork.

Marks in Percentages Class Interval = 8	f
15 - 19	1
20 - 24	1
25 - 29	1
30 - 34	4
35 - 39	1
40 - 44	1
45 - 49	7
50 - 54	2
55 - 59	5
60 - 64	0
65 - 69	0
70 - 74	1

$$N = 24$$

$$A.M. = 44.8$$

$$\text{Median} = 47.1$$

$$\sigma = 13.05$$

$$\sigma A.M. = 2.6$$

There were six failures i.e. 25% out of the 24 pupils at the Std. VII stage. One pupil scored under 20%. Eight i.e. 33 $\frac{1}{3}$ % scored over 50% including one over 70%.

Std. VIII:

At the Junior Certificate Examination, 1957, ten pupils from our group offered Woodwork and attained the following symbols:

<u>Symbol</u>	<u>Number of Pupils.</u>
BB (70 - 74%)	2
C (60 - 69%)	3
D (50 - 59%)	3
E (40 - 49%)	2

The ten pupils obtained 100% passes; there were no scores below 40% and 5 i.e. 50% of the candidates attained over 60% including two who obtained 70% or over.

Needlework and Dressmaking.

(a) Aims:

(i) To achieve good standards of workmanship in needlework and dressmaking.

(ii) To create an interest in the making of clothing.

(iii) To teach pupils to dress well and correctly and to care for clothes.

(iv) To give a knowledge of textiles and to buy correctly.

(v) To provide fundamental training for the making of clothing.

(vi) The correct use and care of equipment.

(vii) The use of patterns.

N.B. A set of down-to-earth practical aims which is in sharp contrast to the flighty and verbally embroidered aims of the previous subject.

(b) Examination Achievements, 1957.

TABLE LXIV.

Std. VI. Distribution of Examination Marks (Percentages) of Case-group in Needlework.

Marks in Percentages Class Interval = 5	f
25 - 29	1
30 - 34	1
35 - 39	3
40 - 44	2
45 - 49	4
50 - 54	2
55 - 59	1
60 - 64	3
65 - 69	1
70 - 74	1
75 - 79	1
80 - 84	1

N = 21
 A.M. = 52.3
 Median = 49.4
 σ = 14.6
 σ A.M. = 3.2

Only one pupil failed and there were no scores under 25%. Ten pupils scored higher than 50%, 7 of these or $33\frac{1}{3}\%$ scored over 60% and one of these over 80%.

Std. VII.

There were not sufficient pupils in the group studying Needlework at the Std. VII level to provide any indications.

Std. VIII.

There were only two candidates from our group for the Junior Certificate Examination in Needlework and Dressmaking in 1957.

Both passed, one with over 75% and the other with over 40%.

Domestic Science:

(a) Aims:

"The course in domestic science aims at providing:

(i) The basic information regarding

(a) the selection and care of home-furnishings and equipment.

(b) the planning of the household routine work;

(c) the apportioning of the housekeeping money to obtain an adequate and balanced diet.

(2) The initial experience and practice in the manipulative skills necessary for keeping the house and its contents clean and in preparing the daily meals required by the family."

(b) Examination Achievements, 1957.

TABLE LXV.

Std. VI. Distribution of Examination Marks (Percentages) of Case-group in Domestic Science.

Marks in Percentages Class Interval = 5	f
10 - 14	1
15 - 19	0
20 - 24	5
25 - 29	2
30 - 34	2
35 - 39	1
40 - 44	6
45 - 49	4
50 - 54	3
55 - 59	2

$N = 26$

A.M. = 38.5

Median = 41.6

$\sigma = 12.45$

$\sigma_{A.M.} = 2.44$

There were 9 failures out of 26 candidates i.e. 34% failures. One pupil obtained less than 20% and 5 pupils obtained over 50% but did not reach the 60% mark.

Std. VII.

There were not sufficient pupils in our group offering domestic science as a subject at the Std. VII level to give any reliable indication.

Std. VIII.

There were three candidates from our group who offered domestic science as a subject for the 1957 Junior Certificate Examination. All three passed, one with an E (40 - 49%), one with a D (50 - 59%) and one with a B (75 - 80%).

Typewriting:

(a) Aims:

"Training the junior secondary pupil in typewriting aims at placing him in a position to:

(i) type with a measure of skill and accuracy

from given data, to make carbon copies and to type stencils;

(ii) be competent to do normal office typing;

(iii) acquire knowledge of simple commercial documents.

(b) Examination Achievements, 1957.

Std. VI.

There were no pupils in the group who offered typewriting as a subject at the Std. VI stage.

TABLE LXVI.

Std. VII. Distribution of Examination Marks (Percentages) of Case-group in Typewriting.

Marks in Percentages Class Interval = 5	f
15 - 19	3
20 - 24	4
25 - 29	3
30 - 34	1
35 - 39	1
40 - 44	3
45 - 49	1
50 - 54	3
55 - 59	1
60 - 64	2
65 - 69	0
70 - 74	0
75 - 79	2
80 - 84	2

$N = 26$
 $A.M. = 43.5$
 $Median = 41.7$
 $\sigma = 20.8$
 $\sigma A.M. = 4.07$

There were 11 pupils or 42% failures in typewriting at the Std. VII stage. Ten pupils obtained over 50% with four of these over 75%.

Std. VIII:

Nine pupils from our group offered typewriting for the Junior Certificate Examination in 1957.

The results were as follows:

<u>Symbol</u>	<u>Number of Pupils</u>
A (80 - 100%)	1
C (60 - 69%)	3
D (50 - 59%)	1
E (40 - 49%)	2
F ($33\frac{1}{3}$ - 39%)	1
G (20 - 29%)	1

One pupil failed and more than half of the number obtained over 50% , with one A, the highest single achievement in any subject by a member of the case-group in the 1957 Junior Certificate Examination.

C. STANDARDISED SCHOLASTIC TESTS:

The standardised scholastic tests mentioned earlier in this dissertation were applied to determine objectively the standard attained by our case-group in some basic aspects of language and arithmetic.

The tests used were the following of the National Bureau of Educational and Social Research:

(i) Silent Reading Paragraphs Junior Form A for the English speaking pupils and Form B for the Afrikaans speaking pupils (i.e. N.B. 34 and N.B. 46 respectively)

This is really a reading comprehension test and was included to assess objectively the ability of dull-normal pupils to comprehend what they read.

(ii) The Language Usage Tests English Junior Form B, N.B. 72, Afrikaans Junior Form B, N.B. 77.

The Usage tests are designed to test punctuation, spelling, vocabulary, idiom, synonyms and practical use of grammar.

(iii) Milne's Witwatersrand Arithmetic Test, Fundamental Processes, Form A (N.B. 150). The Mechanical Computation and Problem sections of the same test were not included because it was not intended to test the arithmetical ability of the group in all its aspects.

The main purpose in applying the standardised scholastic tests in First Language (only) and Arith-

metic, Fundamental Processes (only), was to obtain additional information which could indicate whether these dull-normal pupils had the basic knowledge to be able to profit by secondary education.

In the next few pages the results of these tests are tabulated. The results of the Silent Reading, Paragraphs test and of the Usage Test are given together on the same page for each standard. In tabulating no difference was indicated between English and Afrikaans speaking pupils.

At the outset it must be emphasised that the norms of standardised scholastic tests are not constant or absolute. Changes of curriculum and even the rate of progress of a teacher through the syllabus would effect the results. To ensure the optimum achievement for our case-group in these tests, the Junior forms of the language tests were used instead of the Senior forms which were really designed for the secondary stage.

1. Standardised Language Tests:

Std. VI.

Results of Silent Reading, Paragraphs Junior and Language Usage, Junior, Tests.

<u>Standard in Test</u>	<u>Number of Pupils</u>	
	<u>Paragraphs</u>	<u>Usage</u>
VIII 1	2	2
VII 4	3	1

<u>Standard in Test</u>	<u>Number of Pupils</u>	
	<u>Paragraphs</u>	<u>Usage</u>
VII 1	6	7
VI 4	7	1
VI 3		4
=====		
VI 2		2
VI 1	7	8

V 4	10	5
V 3		3
V 2		2
V 1	13	22
IV 4	10	9
IV 3		6
IV 2	7	5
IV 1		12
III 4		6
III 3	5	1
III 2	5	1
III 1	11	3
II 3	5	
II 2	5	
II 1	4	

The double horizontal lines indicate the division between pupils who are of the expected⁽¹⁾ or higher standard and those below the line whose achievements

1. The Roman figures indicate the standard and the Arabic figure next to it, the term e.g. VI 3 means the third term of the Std. VI year. The tests were taken in the 3rd term of the year.

in the two tests are lower than their actual school standards. The single horizontal line marks the end of the primary stage. All those pupils whose scores fall below this line have not yet reached, according to these tests, secondary standard in those aspects measured by the two tests.

With the horizontal lines clearly indicating the very severe retardation, both in comprehension and in usage it would be superfluous to analyse the tabulated figures. With 75% still at the primary stage in both these aspects of language ability and with 35% below the Std. IV stage in Comprehension some of the problems which these pupils are bound to meet in the secondary school, can be imagined.

Std. VII:

<u>Standard in Test</u>	<u>Number of Pupils</u>	
	<u>Paragraphs</u>	<u>Usage</u>
IX 4	4	
VIII 4	1	
VIII 2	1	
VIII 1		
VII 4	1	4
=====		
VII 1	6	10
VI 4	10	5
VI 1	14	15

V 4	6	5
V 1	12	19

<u>Standard in Test</u>	<u>Number of Pupils</u>	
	<u>Paragraphs</u>	<u>Usage</u>
IV 4	5	8
IV 3	2	6
IV 2	5	6
III 3	1	1
III 2	6	1
II 3	2	
II 2	2	
II 1	2	

These figures and horizontal lines reveal the same pattern of severe retardation as in the case of the Std. VI group.

Std. VIII.

<u>Standard in Test</u>	<u>Number of Pupils</u>	
	<u>Paragraphs</u>	<u>Usage.</u>
IX 1	4	
VIII 4	2	2
VIII 3	2	
=====		
VIII 1	1	3
VII 4	3	4
VII 3		3
VII 2		4
VII 1	4	1
VI 4	9	4
VI 3		1
VI 2		4

<u>Standard in Test</u>	<u>Number of Pupils</u>	
	<u>Paragraphs</u>	<u>Usage</u>
VI 1	5	5

V 4	5	1
V 2		2
V 1	3	5
IV 4	3	1

The pattern of retardation is repeated especially as far as Language Usage is concerned.

2. Implications of results of Standardised Language Tests.

The results of these tests as tabulated have revealed extreme retardation in respect of reading comprehension ability and language usage ability. Judged by these revelations only the vast majority of pupils of our group in Stds. VI and VII should not have been in the secondary school at all and few of the Std. VIII group should have been there. Such judgment will be strengthened by the fact that the tests used were intended for Std. IV, V and VI (a primary standard at the time) instead of the senior versions of the tests intended for secondary schools. If the latter versions of the tests were used the achievements could have been appreciably lower.

When passing such judgment one would prefer

also to consider the first language achievements of the group in their school examinations - and then we find that the latter does not corroborate the standardised test results. The case-group's achievements in their first language rank among their best; both in averages obtained and in percentage passes.

How may these apparently contradictory results be reconciled or at least explained? One explanation would be that the standards of the school examinations are too low. Another would be that the school examinations do not measure the same factors or do not allocate the same value in marks to certain factors, as is done by the standardised tests.

Another explanation would be that the method of writing language examinations in the junior secondary course favour the dull-normal child.

It must also be remembered that major curricular changes have been affected in the primary as well as in the secondary school since the time when the two language tests were standardised.

In an article "Psychology in the Classroom"⁽¹⁾ Christopher Sly stated:

"Test scores should always be interpreted rather than passively accepted: --- the use of a particular test involves certain assumptions about the curriculum that are not necessarily valid."

In the writer's opinion the two apparently contradictory results must not be regarded as such

1. Teacher's World Oct. 30, 1957. p. 21.

but rather as complementary results, each giving us a picture of different aspects of the pupils language ability. In the case of a pupil who passes the Std. VII examination at school in his first language but only reach Std. III 3 in the Paragraphas test and Std. IV 2 in the Usage test, the writer accepts the school marks as correct in respect of the aspects tested by the school examination and he also regard the results of the two standardised tests correct in the aspects measured by them. In other words, we accept the pupils Std. VII school pass in his first language but are aware that his reading comprehension is † Std. III standard and his usage of the language in respect of spelling, idiom, practical grammar and vocabulary is † Std. IV standard i.e. as compared to the standards prevailing when the tests were standardised.

As far as our purpose is concerned with the introduction of these standardised tests in this study, the results indicate that, irrespective of the fair success achieved in the examinations in the first (English and Afrikaans) by our group, there are several factors of language skill in which the proficiency of the group is very low.

The extent to which this disability effects the achievement of dull-normal pupils in their secondary careers should provide interesting material for a fruitful investigation.

3. Arithmetic Test (Fundamental Processes) Results:Std. VI:

<u>Standard attained</u>	<u>Number of Pupils.</u>			
	<u>Addition.</u>	<u>Subtrac- tion.</u>	<u>Multipli- cation.</u>	<u>Division</u>
VIII 4		7	16	3
VIII 1	1	4	2	
VII 3		1		
VII 2		7		
VII 1	8			5
VI 4			13	
VI 3		5		1

VI 2	13			7
VI 1	16	2	10	

V 4		12		5
V 3	8			
V 2	10			15
V 1		14	11	
IV 4	21	10	9	12
IV 3		11	2	3
IV 2		5	4	17
IV 1	10		16	11
III 4		5	3	9
III 3	4	6		1
III 2	4	1	6	3
III 1		4	4	4
II 4	2	3	1	2
II 3			1	

<u>Standard attained</u>	<u>Number of Pupils.</u>			
	<u>Addition.</u>	<u>Subtraction.</u>	<u>Multipli- cation.</u>	<u>Division</u>
II 2	2			1
II 1		2	1	
I 4	1			
Sub B		1	1	1

Std. VII:

<u>Standard attained</u>	<u>Number of Pupils.</u>			
	<u>Addition.</u>	<u>Subtraction</u>	<u>Multipli- cation.</u>	<u>Division</u>
VIII 4		6	6	5
VIII 1	1	6	7	1
VII 4	2			1
VII 3				1
=====				
VII 2		5		
VII 1	13			5
VI 4			4	
VI 3		6		3
VI 2		2		8
VI 1	16	1		9

V 4		14		4
V 3	9			4
V 2	2			3
V 1		6	11	
IV 4	10	8	12	14
IV 3	1	4	2	5

<u>Standard attained</u>	<u>Number of Pupils.</u>			
	<u>Addition.</u>	<u>Subtrac- tion</u>	<u>Multipli- cation</u>	<u>Division</u>
IV 2	1	8	4	9
IV 1	13		4	5
III 4		5	5	
III 3	3	3	3	1
III 2	4	1	2	5
III 1			3	1
II 4	1		3	3
II 3		1		
II 2		1		
II 1	1	1	2	1
I 4	1	1	1	
I 3	1	1	1	1
I 2	1		1	

Std. VIII:

<u>Standard attained</u>	<u>Number of Pupils.</u>			
	<u>Addition</u>	<u>Subtrac- tion</u>	<u>Multipli- cation</u>	<u>Division</u>
VIII 4		6	2	4

VIII 1	1		2	
VII 3		1		
VII 2		3		
VII 1	6			3
VI 4			4	
VI 3		2		1
VI 2				2

<u>Standard Attained</u>	<u>Number of Pupils.</u>			
	<u>Addition.</u>	<u>Subtrac- tion.</u>	<u>Multipli- cation</u>	<u>Division.</u>
VI 1	8	1	4	

V 4		9		5
V 3	6			1
V 2	1			3
V 1		5	5	1
IV 4	9	5	6	8
IV 3		3	4	5
IV 2		3		2
IV 1	6		4	1
III 4			2	1
III 3	3	2	2	
III 2				1
III 1			3	2
II 4			1	
II 3				
II 1			1	

4. Implications of the Results of the Milne's
Arithmetic Test (Fundamental Processes)

In the results of the standardised language tests there appeared to be an irreconcilable deviation from the results of the school examinations in the first language. In the case of the Milne Arithmetic Test (Fundamental Processes) the lack of fundamental arithmetical ability as evinced in this test is fully corro-

borated by the school examination results in general mathematics.⁽¹⁾

By scrutinising the positions of the double and single horizontal lines in the preceding tables it is clear at a glance that not only are the vast majority of pupils from our case-group in all three standards below the ability level for those standards but the majority are also below the standard-level of the last term of the primary school.

The figures speak for themselves. In the Std. VIII group for instance there were 25 out of 40 in addition, 27 out of 40 in subtraction, 28 out of 40 in multiplication and 30 out of 40 pupils in division below secondary level.

This pattern is repeated in Stds. VII and VI in all four fundamental processes.

According to their achievements in the Milne Arithmetic Test there can be no doubt that over 60% of the dull-normal pupils of our case-group did not have sufficient skill in the fundamental processes to achieve success in the study of general mathematics at even the lowliest secondary level. This statement is corroborated by the examination results recorded earlier in this chapter.

1. The Std. VI course in general mathematics consists of pure arithmetic only; geometry and algebra are introduced at a later stage in the course.

D. PROMOTION AND SCHOOLLEAVING:

When analysing the main features of the junior secondary course earlier in this study it was pointed out that divisions within the course would be according to the traditional standards system and that promotion from one standard to the next would take place on the results of internal end-of-the-year examinations.

When tabulating and analysing the results in respect of the various subjects the high percentage of failures provided pointers to what the results of the examinations as a whole would be. The initial study mentioned in the INTRODUCTION to this dissertation provided an early pointer in the same direction.

In August-September 1957 when the tests and Questionnaire were applied the numbers in our case-group were:

Std. VI	...	...	100 pupils
Std. VII	...	...	80 pupils
Std. VIII	..	...	40 pupils
TOTAL			220 pupils.

1957:

Std. VI: Of the 100 pupils in the first year of the course in 1957, 48 failed in the Nov.-Dec. examination of that year.

Of those who failed 26 left school (without Std. VI Certificate) and 22 remained for a repeat year.

Of the 52 pupils who passed, 24 left school (with Std. VI Certificates) to find employment, leaving 28 to continue in Std. VII.

This means that out of 100 pupils in Std. VI in our group in September 1957, 50 left school by the end of that year.

1957:

Std. VII: Of 80 pupils in our group in Standard VII, 46 failed at the end of the year. Of those who failed 30 left school (not necessarily with Std. VI certificates) and 16 remained at school for a repeat-year.

Of the 34 pupils who passed, 15 left school (with Std. VII Certificates) and 19 remained to continue in Std. VIII.

1957:

Std. VIII: Of 40 pupils in Std. VIII in our group, 22 failed in the Junior Certificate examinations at the end of the year and left school (with Std. VII Certificates). Of 18 who passed, 13 left (with Junior Certificates) and 5 remained at school to attempt the Senior Course.

July 1958:

Summarising the position we find that within 12 months of the compilation of the case-group, 130 members of the group had left school i.e. only 90 remained of which number 38 were doing repeat-years (22 in Std. VI and 16 in Std. VII) and 52 were doing the next standard. Within one year the case-group as originally constituted had ceased to exist.

By the end of the year 1958 it was found that more pupils had left, some even before the 1958 examinations and by the beginning of 1959 approximately

28⁽¹⁾ of our original case-group remained at school, spread over three standards.

The above figures indicating the rate of failure and of schoolleaving in this group corroborate the evidence of the initial study mentioned in the INTRODUCTION. This data also justify the particular method of research adopted in this study i.e. to select a group and study their responses and achievements intensively over a short period only while the group can be held together.

E. CONCLUSION:

The general conclusion to be drawn from the contents of this chapter will be discussed in the final chapter of this study.

As regards specific conclusions, these were in most cases so glaringly indicated by the tables and figures provided and by the sectional summaries of pupils attitudes and evaluation and achievements, that a summary of specific conclusions at this stage would be mere repetition.

1. There is some doubt concerning the where-abouts of 6 pupils who have left the area to attend schools elsewhere. They are not included in this number.

SECTION C

UNDERSTANDING

THE PROBLEM

CHAPTER VICONCLUSIONSAND RECOMMENDATIONS.

In the INTRODUCTION the task of this investigation was visualised as the evaluation of the results of the junior secondary course in respect of the education of dull-normal pupils as reflected by the latter's school careers and scholastic achievements. To this end an analytical and critical study was made of the development of secondary education in the Cape Province, of an important Report on education and of the aims and features of organisation, etc. of the junior secondary course.

Turning from the school to the child, a criteria for dull-normality was established and a case-group consisting of 220 dull-normal pupils was constituted and described. The methods and measuring instruments to be used were selected, described and applied.

The results of the questionnaire, the school examination and the standardised tests were tabulated and discussed in Chapters IV and V.

With the acquired information at our disposal the task remaining is to evaluate the results of the junior secondary course for the members of our case-group and to make recommendations in the light of these findings and decisions.

1. Evaluation of the results of the Junior Secondary Course as reflected by the school careers and achievements of a group of dull-normal pupils:

It is doubtful whether any system of pre-established criteria could provide a more lucid picture of the entire situation effecting our case-group than the tables of the questionnaire, examination and test results in Chapters IV and V.

The main trends indicated by these results can now be examined with the aid of criteria suggested by the five factors mentioned earlier (vide supra p. 101 - 102). One could say that, to be successful, the junior secondary course should meet as far as possible its own aims, the universally accepted as well as national aims and finally it should attempt to meet the needs of the adolescent of below average ability.

These factors suggest the following headings under which to evaluate the results we have obtained: (a) Individual guidance (b) Removal of frustration-arousing situations (c) Profitable secondary school career (d) Adequate Holding-power.

(a) Individual Guidance:

The Introduction to the junior secondary course stressed the importance of early discovery of special abilities and intellectual capacities and the planning of each pupil's school career. It also states

"----- it is extremely important that the development of the individual child should be carefully watched and guided."

Finally the introduction stress the importance of school guidance.

The most important aspects of guidance in any modern secondary course would concern guidance in connection with choice of subjects; guidance in respect of personal problems and guidance in respect of the choice of a vocation. A comprehensive guidance program should cover a much wider segment of the child's life - the three aspects given here and concerning which the Questionnaire gathered information, constitute the bare minimum.

The results of the Questionnaire indicate inter alia that:

(i) in respect of choice of subject 152 pupils out of 220 never had individual interviews with a teacher,

(ii) in respect of personal problems 174 pupils never had individual interviews with a teacher and

(iii) in respect of the choice of a career, 180 pupils never had individual interviews with a teacher.

These figures are according to the answers supplied by the pupils themselves.

There can be no doubt however, that these figures reflected the true situation. This is borne out by the other responses under section (F) of the questionnaire i.e. vocational choice.

One hundred-and-nineteen pupils indicated that

they intend to leave school after Junior Certificate and 59 that they would leave after Senior Certificate How far their intentions were removed from reality becomes clear when one considers that a year after these intentions were noted, the majority of the pupils concerned had left school.

The almost entire lack of guidance is further manifested by the vocational aspirations of the group of whom 41 or 18.6% indicated vocations absolutely beyond their ability and 56 or 25.4% indicated vocations in which these pupils will find themselves in unequal competition against mentally stronger boys and girls.

In respect of intended school careers and vocational choice these figures indicate that the lack of guidance left a large percentage of these pupils in an unrealistic dream-world which had no relation to their mental potentialities or the actualities of a career.

As far as guidance is concerned no other deduction can be made but that in respect of the dull-normal pupils the junior secondary course did not provide the necessary facilities to fulfil its expressed obligations.

(b) Removal of Frustration Arousing Situations:

In our discussion of the needs of the adolescent and in particular of the dull-normal adolescent it was pointed out that they need the ego satisfaction that comes from successful achievement. It was

also pointed out that not all disappointments are frustration-arousing, at least not for any length of time. Others, however will cause emotional stress.

The junior secondary course have retained the main frustration-arousing feature of the old secondary school i.e. the promotion examination which can be passed or failed. These examinations are set on work intended for the normal child.

How did our group fare in this respect?

The answer is a dismal story of failure and frustration.

In the Std. VI year the percentage of failure in the various subjects as indicated by the tables in Chapter V were: English (First Language) 19.5%, Afrikaans (Second Language) 34.1%, Social Studies 39%, General Science 40%, General Mathematics 59%, Business Methods and Bookkeeping 41.7%, Woodwork 16.6%, Needlework 4.7%, Domestic Science 34%.

It is not necessary to repeat these results; the same pattern of failing occurs in Std. VII and VIII.

In addition to the high incidence of failing in every subject (excepting Afrikaans, First Language and Needlework) the average marks attained are so low and the percentage pupils occasionally exceeding 50% in a subject so small that it does not relieve this picture of gloom.

Scholastically there is no question of frustration-arousing situations being removed - for the vast majority of pupils in our group the whole course (or

as far as they attended) represented one long process of frustration.

The system of examinations with a view of providing for three types of ability as suggested by the Department, was not accepted by the schools or did not realise its aims.

In certain subjects the rate of failing was exceptionally high. In Mathematics for instance it was 59% in Std. VI, 76.25% in Std. VII and 73.3% in Std. VIII. Mathematics was also the most unpopular subject of all; 57% pupils indicated that they liked mathematics least of all their subjects; yet there was nothing they could do to rid themselves of this frustration-arousing factor.

The vast majority of pupils in the group failed in two or more subjects and did not achieve anything like compensatory results in those subjects that they did pass.

Pathetic were the cases where repeat-years were done and failing occurred in subjects that were passed in the first year but which had to be done again because the examination as a whole was failed in the first instance.

It can be stated, without fear of contradiction, that it would be difficult to put into practice a secondary education system which would present more frustration-arousing opportunities for the dull-normals than the junior secondary course.

(c) Profitable Secondary School Career:

This is one aim accepted specifically by the junior secondary course in its introduction. When analysing the course we have criticised this aim because what is regarded as profitable may differ from educationist to educationist.

No educationist in the world can regard the time at a secondary school profitably spent, if 48 out of 100 Std. VI pupils (29 of whom were already repeating a year) failed in the promotion examination at the end of the Std. VI year or if 46 out of 80 candidates failed at the Std. VII level or 22 out of 40 failed at the Std. VIII level.

The time could not have been profitably spent if 26 left (some after 2 years at secondary school) without any school certificate; if 74 left (many with three years at secondary school) with a Std. VI certificate which gives them admission to nothing more than the Alternative Std. VI Certificate awarded to Special Class Pupils (I.Q. 65 - 80) at the end of their primary school career.

It has been said that the secondary course gives more to a pupil (or less) than may be revealed by an examination. This may be so but since there is no way of measuring this elusive quality it cannot be claimed that it had been provided by the junior secondary course.

If the extremely poor performances in the individual subjects are considered, if it is taken into account that only 15.9 - 16.8% of our pupils declared

that secondary school assisted them with the choice and development of their hobbies; if 50% of the group did not take part in any school sports; if the vast majority of pupils did not belong to school-sponsored clubs, it is difficult to see where this elusive quality is to be looked for in the case of the junior secondary course.

With the information at our disposal the only conclusion at which one could arrive irrespective of one's general educational views, is that the junior secondary course failed to provide opportunities for the dull-normal pupils to spend their final school years profitably.

(d) Holding-Power of the Junior Secondary Course:

The severest criticism against the old system of education in the Cape Province was levelled at the huge wastage of human material at the end of the primary stage i.e. at the Std. VI stage, as it was then.

In Chapter I (vide supra p. 29) it was pointed out (with reference to Table I p. 30) that of 100 pupils who were in Std. VI (end of primary school) in 1936, only 66 were in Std. VII in 1937.

Elsewhere (vide supra p. 31) the remarks of a Union Secretary of Education were mentioned to the effect that of every 100 pupils who enter the primary school, only about 60 pass Std. VI and he was very perturbed about the loss of the 40%.

In respect of the dull-normal group in the junior

secondary course, the position is much worse.

Of the 100 pupils in our Std. VI group in 1957 there were only 24 in Std. VII in 1958! The rest had left school or were repeating Std. VI.

As regards the remarks of the Secretary for Education (vide supra p. 31) i.e. that out of 100 pupils who enter the primary school only 60 pass Std. VI, the position in our case-group was that out of 100 pupils who have actually reached Std. VI, only 52 passed.

Here, in the writer's opinion, is the main tragedy of the dull-normal group in the junior secondary course. Out of a case-group of 220 pupils only 90 remained at school after the end of the first year. There is no doubt that the junior secondary course exert no holding-power of any strength on the dull-normal child and that in this respect the course has failed utterly.

The tragedy is that these pupils just seem to disappear from the course; "unwanted and unsung" they leave the precincts of these utterly wanting institutions, as far as their needs are concerned, to seek employment in a world which still sets high store by achievements and certificates and adequate training.

2. RECOMMENDATIONS:

Having arrived at the conclusion that the junior secondary course has failed in major aspects to provide in the needs of the dull-normal pupils, the question

arises whether there are any indications and principles arising out of this study which could bring about an improvement in the educational facilities of dull-normal pupils.

It was not, in the first place, the task of this study to investigate possible reforms; our task was to evaluate so as to be able to determine whether reform is needed. As a pilot-study it was also the task of this investigation to indicate further fields of study which will have to be investigated.

There are a few outstanding principles which will have to be observed in any scheme intended to bring about change in the present situation.

Firstly, there can be no claim of "secondary education for all" in the absence of automatic promotion in the primary school; or, put differently, secondary education for all is absolutely impossible without the total abolition of failing in the primary school.

Time expended on arguments about the supposedly lower standards in the basic subjects that would result from automatic promotion in the primary school, could very well be used in devising ways and means of raising those standards without the system of failing. Our dull-normal group arrived at the secondary level at various stages of age retardation; yet their failing in the primary school did not provide them with good standards in the basic subjects; at least not according to the results of the standardised tests applied.

There should be no talk of homogenous ability at

the Std. V level as an essential requirement for success at the secondary level; excepting as an ideal to be achieved through more scientific methods of teaching in the primary school and more scientific advice to teachers in primary schools. However ideal such a state of affairs would be, the future of post-primary education cannot be made dependant on this factor of homogenous levels at the end of the primary stage.

If we accept the principle of not failing pupils in the primary school the 7 years primary course should be completed by the time the child reach thirteen. The pupil will then have three years compulsory education ahead i.e. if it is enforced at the same time, that a pupil may only leave school at the end of the year in which he turns sixteen.

The second principle is that the dull-normal child does not fit into the educational edifice constructed for the normal child. It was repeatedly indicated in this study how departmental experts have endeavoured to make provision for the dull-normal pupil within the frame-work of the junior secondary school. Examinations have to contain questions at three ability levels, courses have to be attenuated; aggregates for the five best subjects are taken for determining a pass; in spite of all these the dull-normals continue to fail by the score and to leave school at the first opportunity.

The writer does not think that improvisations with the junior secondary course could meet the needs of the dull-normal group. Studies should

be undertaken to determine experimentally and empirically the contents that should go in post-primary curricula~~s~~ designed for dull-normal pupils. But that is not enough.

A special kind of secondary education have^y been introduced in the Cape Province in respect of the mentally retarded child; i.e. pupils who are certified as mentally handicapped in terms of the Special Class Act. They fall in the I.Q. group [†] 65 - 80 and are transferred at the age of 14 - to Special Secondary Schools where they receive three years work-shop training in a particular trade in addition to the continuation of their studies in the two language, arithmetic, social studies and general science.

It could be called a technical school but in our South African system of divided control of education the name technical is reserved for institutions of the Union Education Department. By calling it a secondary school and providing secondary education of a special kind, this type of school remains the responsibility of the Province.

The writer believes₂ that the educational salvation of the dull-normal group must be sought in the same direction. Obviously more advanced technical and scholastic courses could be offered to this group than to the "mentally retarded." A wider variety of vocational courses could be included preparing also for clerical and commercial careers - it must provide vocational preparation and it must continue the general education to the level where, what has been called "the law of diminishing returns"

begins to operate.

My recommendation is not that dull-normal pupils should be admitted to these special secondary schools as they are at present constituted. The result, quite apart from a host of difficulties, could well be that the standard of work at these schools are then raised to a level where the mentally retarded child will find himself at a disadvantage.

It may not be impossible to provide similar facilities for dull-normal pupils within the existing secondary school buildings but outside the junior secondary course. It may not be impossible for such a scheme to be worked out in conjunction with a system of parttime training in industry and trade under the school's supervision. The details of such a scheme and the contents of courses to be included in such a scheme could be investigated by other studies of the dull-normal and his abilities and disabilities. It is not the task of this study.

Our main recommendation is that the present situation should not be allowed to continue. This study has convinced the writer that the position of the dull-normal pupil in the junior secondary course is very similar to what the position of the mentally handicapped (I.Q. 60 - 80) pupils used to be in the primary course prior to the introduction of a system of special classes for mentally handicapped pupils. At the higher level of the secondary school the dull-normals are out of intellectual depth in the same way as the mentally retarded were out of their intellec-

tual depth in the normal classes of the primary school.

Special provision even to the extent of post-primary education have been made for the mentally handicapped. It is as important to make special provision for the special education of the dull-normal child at secondary level.

In the present situation a serious injustice is being perpetrated against the dull-normal child under the guise of secondary education for all. Under the present system they are absorbing very little education of any kind; let alone secondary education.

If my suggestion of technical and commercial training for the dull-normal is considered to be too vocational in outlook the answer is that (1) in South Africa secondary education has always been regarded as training for a career (however inadequate); (2) the proposed plan falls within the greatest definition of secondary education ever formulated i.e. that of the Bryce Commission and (3) the tradition of the nation makes it imperative that every European should be adequately trained to maintain himself and his position in this multi-racial country.

This then is our main task in respect of the dull-normal child - so to train and prepare him for life that his efficiency will off-set his lack of mental ability to such an extent that his natural disability will not constitute a threat to the survival of the European races in this country.

CONFIDENTIAL

QUESTIONNAIRE FOR SECONDARY PUPILS.

TO THE PUPIL:

Please complete this Questionnaire fully, accurately and honestly. The information supplied by you will help us to solve some of the problems of boys and girls in Secondary Schools.

Your answers will be regarded as confidential and no one who knows you personally shall have access to them.

A. P E R S O N A L:

1. NAME OF SCHOOL:
2. HOME LANGUAGE: Afrikaans, English, German,
Dutch, Other
3. SCHOOL MEDIUM: Afrikaans, English.
4. STANDARD:
5. PRESENT SUBJECTS:
-
6. Your name in full
Surname (First Name)
7. Home address:
8. Date of birth:
9. Your age last birthday:
10. Number of older brothers
- Number of older sisters
- Number of younger brothers
- Number of younger sisters

11. Your father's occupation. (Describe)

B. H E A L T H

1. What is the general condition of your health?
 (a) Good, (b) Fair, (c) Indifferent,
 (d) Bad.
2. What are your most serious ailments?
3. Do you have to wear glasses? Yes or No.
4. Do you have to wear glasses only when reading or
 writing?
5. Have you ever had trouble in hearing? Describe.

6. Have you any physical defects e.g. a paralysed
 limb, etc.? Describe
7. How often have you been away from school during
 the first two terms this year on account of ill
 health?

C. RECREATIONAL: SOCIAL: CULTURAL:

1. Have you any hobbies? Yes or No.
 If "Yes", name them
2. Did the Secondary School assist you with
 (a) the choice of a hobby? Yes or no.
 (b) the development of your hobbies? Yes or
 no.
3. How often do you go to bioscope?
 (a) Every week, (b) Once a fortnight, (c) Once
 a month, (d) Less than once a month.
4. How many books do you read per month of your own

- free choice? (Prescribed books, magazines and comics not included)
5. How often do you read comics?
(a) Nearly every day, (b) Quite often,
(c) Occasionally, (d) Almost never.
 6. Give the names of Magazines received regularly in your home:
 7. How often do you read these magazines?
 8. How often do you read a newspaper?
(a) Nearly every day, (b) Quite often,
(c) Occasionally, (d) Almost never.
 9. How often do you listen to the Radio?
(a) Nearly every day, (b) Quite often,
(c) Occasionally, (d) Almost never.
 10. Is there any particular programme which you prefer, and to which you listen regularly?
Yes or No.
If so, name the programme.
 11. Of which of the following youth clubs or movements are you a member? Underline.
(a) Voortrekkers, (b) Boy Scouts,
(c) Girl Guides, (d) Red Cross
(e) Noodhulpliga, (f) Sunday School,
(g) Club (name)..... (h) Jive Club.

D. PRIMARY SCHOOL CAREER:

1. Which schools did you attend during your Primary School career?
2. At which Primary School did you pass Std. V?
.....

3. In what year?
4. What standards did you fail in in the Primary School? (Mention Standards and times failed.)
.....
5. For which team did you play in the Primary School?
(a) Cricket(b) Rugby(c) Soccer
(d) Tennis (e) Hockey(f) Netball ...
6. Mention any successes you might have had in athletics in the Primary School?
7. Did you ever fill a position of honour or leadership during your Primary School career?
(a) Class Captain; Std. ... (b) Monitor: Std. ..
(c) Sports Captain; Std. Team
(d) Prefect; Std. (e) Chairman; Std. ...
Society (f) Secretary: Std.
Society (g) Other; (indicate nature)
.....

E. SECONDARY SCHOOL CAREER:

1. When did you enter this school and in what standard?
2. Have you attended any other Secondary School
If so, give the names
3. Why do you attend Secondary School? Indicate by underlining one of the following:
(a) Because you are compelled by law to attend school up to 16 years of age.
(b) Because your parents would have compelled you to attend Secondary School in any case.
(c) Because you wish to acquire a Junior Certificate / Senior Certificate.
(d) Any other reason. State your reason:

4. Would you leave school now if you are allowed to do so? Yes or No.
5. Would you have come to Secondary School at all if you had a choice? Yes or No.
- Do not indicate your second language as an answer to the next six questions.
6. Which subject in your Course do you like best?
.....
7. Which subjects in your Course do you like least?
.....
8. Are there subjects in your course which you regard as of no value? If so, name them.
9. Are there subjects in your course which you regard as having value for you personally? If so, name them.
10. Are there subjects in your course which you find altogether too difficult to master? If so, name them.
11. Are there subjects in your course in which your achievements are satisfactory? If so, name them.
12. How often have you had individual discussions with a teacher about your choice of subjects:
(a) when called in by a teacher.
(i) Quite often, (ii) Occasionally, (iii) Never.
(b) when you approached a teacher.
(i) Quite often, (ii) Occasionally, (iii) Never.
13. How often have you had individual discussions with a teacher about your personal problems:
(a) Quite often, (b) occasionally, (c) Never.
14. Underline in the following list the activities of your school in which you take part:

- (a) Athletics, (b) Rugby, (c) Soccer
- (d) Cricket, (e) Tennis, (f) Netball,
- (g) Hockey, (h) Debating Society, (i)
- Christian Student Society, (j) Other (describe)
-

15. Name the sports teams in which you have represented your school.

16. Have you ever filled a position of honour or leadership in the Secondary School?

- (a) Class Captain: Std. (b) Sports Captain; Std. Team (c) Monitor Std. (d) Prefect; std.
- (e) Chairman; Std. Society
- (f) Secretary; Std. Society
- (g) Other; describe.....

F. VOCATIONAL CHOICE:

1. When do you intend to leave school?
 - (a) After Std. VI, (b) After Std. VII,
 - (c) After J.C. (d) After Std. IX, (e) After S.C.
2. Have you decided on a vocation? Yes or No.
3. What?
4. Where did you obtain information about this vocation?
 - (a) Parents, (b) Other relatives, (c) Teachers,
 - (d) Elsewhere (indicate where)
5. How often have you had individual discussions with a teacher about the choice of a career:
 - (a) When called in by a teacher.
 - (i) Quite often, (ii) Occasionally, (iii) Never.
 - (b) When you approached a teacher.
 - (i) Quite often, (ii) Occasionally, (iii) Never.

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