

A STUDY OF FAILURE IN SCHOOL WITH SPECIAL  
REFERENCE TO  
INDIAN SECONDARY EDUCATION IN NATAL

BY

CHINNAPEN AMATCHI NAGURAN

B.A., B.Com., B.Ed., N.T.D.

Submitted in part fulfilment of  
the requirements for the degree of

MASTER OF EDUCATION

in the Department of Empirical, Special  
and Remedial Education in the Faculty  
of Education - University of  
Durban-Westville

Supervisor: Prof. A.L. Behr, B.A., B.Sc., B.Sc.(Hons.), M.Ed.,  
D.Ed., U.E.D. Head of the Depart-  
ment of Empirical, Special and  
Remedial Education, University  
of Durban-Westville.

DURBAN

FEBRUARY 1978



## ACKNOWLEDGEMENTS

I wish to express my indebtedness to the following people and organizations for their assistance and co-operation in making this research project possible:

Prof. A.L. Behr, Head of the Department of Empirical, Special and Remedial Education, University of Durban-Westville, for his unstinted guidance throughout this study project. His thoughtful recommendations, interest, encouragement and thorough and able supervision of the research will always be appreciated;

The Director of Indian Education for permission to use information from the records and Departmental files. (As an Education Planner in this Department, the writer was able to receive the ready and willing co-operation of senior officers, principals and teachers);

The Deputy Director, Mr. F.C.W. Hawkins for assisting me with statistical methods used in this study;

Dr. N. van der Walt the Chief Planner, for his inspiration, encouragement and invaluable comments;

Mr. M. Naidoo, Assistant Education Planner, and Mr. P.N. Done for assisting me with calculation of Chi-square statistics;

Mr. H.B. Singh, lecturer in English, Springfield College of Education for kindly checking the language;

Miss Elizabeth Maduray for her personal interest in the typing of the manuscripts;

The Ernst Oppenheimer Memorial Trust for the award of a Study Grant to enable me to meet part of the costs involved in this project;

My son and daughter for typing the draft form of the report and for proof-reading the final typing;

Finally, my wife and children, for their patience and encouragement during the many months of this research.

It is hereby declared that the opinions expressed or conclusions reached are those of the author and are not to be regarded as a reflection of the views of the above-mentioned persons or organizations.

C.A. NAGURAN



C O N T E N T S

	PAG
CHAPTER ONE	
1. THE PURPOSE, SCOPE AND SIGNIFICANCE OF THE PRESENT STUDY .....	1 -
1.1 <u>INTRODUCTION</u> .....	1
1.2 <u>DEFINITIONS AND ASSUMPTIONS</u> .....	3
1.3 <u>THE BACKGROUND TO THE STUDY</u> .....	5
1.3.1 The Indian Community's Concern about the High Failure Rate in Indian Education ....	7
1.4 <u>THE PURPOSE OF THE PRESENT STUDY</u> .....	10
1.4.1 Assumptions and Limitations .....	12
1.5 <u>THE PROBLEM OF FAILURE AND RELATED MATTERS</u> .	12
1.5.1 Socio-Economic and General Environmental Factors .....	13
1.5.2 The Other View .....	22
1.5.3 Economic or Material Circumstances of the Family .....	25
1.5.4 Intelligence .....	29
1.6 <u>SUMMARY</u> .....	32.
CHAPTER TWO	
2. A BRIEF HISTORY OF INDIAN SECONDARY EDUCATION IN NATAL WITH SPECIAL REFERENCE TO EXAMINATION PROMOTION AND RETARDATION PROCEDURES .....	41 - 12
2.1 <u>INTRODUCTION</u> .....	41
2.2 <u>SOCIO-ECONOMIC AND EDUCATIONAL BACKGROUND OF THE INDIAN COMMUNITY IN NATAL</u> .....	41
2.2.1 Structure and Distribution .....	41
2.2.2 Economic Aspects .....	42
2.2.3 Sociological Aspects .....	43
2.2.4 Cultural Aspects .....	45
2.2.5 Educational Aspects .....	45
2.2.6 Summary .....	48
2.3 <u>A BRIEF HISTORICAL OVERVIEW OF INDIAN SECONDARY EDUCATION IN NATAL</u> .....	49

	PAGE
2.3.1 The Curriculum .....	52
2.3.1.1 Streaming in Natal White Schools and its Implication for Indian Education	57
2.4 <u>SOME ASPECTS OF EXAMINATION IN GENERAL</u> .....	60
2.4.1 The Assumptions .....	62
2.4.2 The Decision .....	62
2.4.3 The Criteria .....	62
2.4.4 Manipulation of Failure rates .....	63
2.4.5 The Value of Examination .....	67
2.5 <u>SOME ASPECTS OF INDIAN SECONDARY EDUCATION UNDER THE NATAL EDUCATION DEPARTMENT DURING THE PERIOD 1953 - 1965</u> .....	68
2.5.1 Examinations .....	69
2.5.2 Internal Examination Procedures .....	70
2.5.2.1 Examinations and Promotions .....	71
2.5.2.2 Pupils absent from Examinations ...	72
2.5.2.3 Nature of Examination .....	72
2.5.2.4 Conduct of Examination .....	73
2.5.2.5 Promotion Requirements: Internal Examination - Standards VII and IX .	74
2.5.2.6 External Examination Procedures Prior to Streaming .....	77
2.5.2.6.1 Standard VI Examination for Indian Pupils: 1953 - 1965 .....	77
2.5.2.6.2 The Natal Junior Certi- ficate Examination ....	78
2.5.2.6.3 The Senior Certificate (School Leaving) and the Matriculation Exemption Certificate Examinations	80
2.5.2.6.3 The Natal Senior Certifi- cate Examination 1953-1965	88
2.5.2.6.5 Changes brought about as a result of the introduction of streaming in White Schools: 1966-1971 .....	90
2.6 <u>SOME ASPECTS OF INDIAN SECONDARY EDUCATION UNDER THE DEPARTMENT OF INDIAN AFFAIRS DURING THE PERIOD 1966-1977</u> .....	92



2.6.1	The School Curriculum .....	93
2.6.1.1	Afrikaans .....	96
2.6.1.2	The New System of Differentiated Education .....	98
2.6.2	Examination .....	99
2.6.3	Promotion and Retardation procedures under the Department of Indian Affairs	101
2.6.3.1	Standard VI .....	101
2.6.3.2	Standard VII and IX .....	102
2.6.3.3	Standard VI and VII: (Academic Course) Promotion Requirements	104
2.6.3.4	Standards VIII and IX Promotion Requirements .....	106
2.6.3.5	The Practical Course - Standards VI to VIII Promotion Requirements .....	107
2.6.4	External Examination Promotion and Retardation Requirements .....	108
2.6.4.1	The Junior Certificate Examination .....	108
2.6.4.2	The Senior Certificate Examination .....	108
2.6.4.3	The Senior Certificate Examination Under the New Differentiated Education System .....	110
2.7	<u>THE NORMALIZING PROCEDURE</u> .....	115

### CHAPTER THREE

3.	THE INCIDENCE AND EXTENT OF FAILURE IN INDIAN SECONDARY EDUCATION WITH SPECIAL REFERENCE TO NATAL .....	125 - 187
3.1	<u>INTRODUCTION</u> .....	125
3.2	<u>FAILURE AS REFLECTED IN THE SCHOOLS INTERNAL EXAMINATION SCHEDULES</u>	125
3.2.1	Results of the Standard VI Examination ...	126
3.2.2	Results of the Standard VII Examination ...	131
3.2.3	Results of the Standard VIII Examination ..	139
3.2.4	Results of the Standard IX Examination ...	140



3.3	<u>FAILURE AS REFLECTED IN THE EXTERNAL EXAMINATION</u>	144
3.3.1	The Standard VI Examination results under Natal Education Department .....	145
3.3.2	The Standard VIII (J.C.) Examination Results ...	147
3.3.3	The Results of the Senior Certificate Examination	152
	3.3.3.1 Failure according to subjects .....	162
	3.3.3.2 Ratio of Boys and Girls failing subjects	165
3.4	<u>AN OVERVIEW</u> .....	172
3.4.1	Prior to Streaming in Indian Schools .....	173
3.4.2	The Period during the system of Streaming in White Schools in Natal .....	174
3.4.3	The Period during Streaming in Indian Schools under the Department of Indian Affairs .....	177
3.4.4	The Period during the introduction of the New System of Differentiated Education .....	179
3.4.5	The holding power of Indian Schools .....	182

#### CHAPTER FOUR

4.	A STUDY OF FAILURE AT THE STANDARD VIII LEVEL IN A SELECTED GROUP OF INDIAN SECONDARY SCHOOLS IN NATAL. ..	188 - 24
4.1	<u>THE NATURE OF THE PRESENT STUDY</u> .....	188
4.2	<u>PROCEDURE IN THE PRESENT STUDY</u> .....	189
	4.2.1 Sampling .....	189
	4.2.2 Choice of Methods for gathering Information .....	195
	4.2.2.1 The teachers' questionnaire .....	196
	4.2.2.2 Pupils' questionnaire .....	197
	4.2.3 Distribution of questionnaires .....	198
	4.2.4 Replies received .....	199
	4.2.5 Checking and Verifying .....	200
4.3	<u>DATA PROCESSING AND STATISTICAL ANALYSIS OF RESULTS</u>	200
	4.3.1 Data processing .....	200
	4.3.2 Methods of Statistically analysing the results ..	202
4.4	<u>THE RESULTS OF THE PRESENT STUDY</u> .....	205
	4.4.1 Sex of Pupils and Academic performance .....	206
	4.4.2 Age of Pupils and Academic performance .....	207
	4.4.3 Academic performances and certain aspects of Socio-Economic background .....	208



	PAGE
4.4.3.1 Fathers' occupation .....	208
4.4.3.2 Parents' Western level of education ...	212
4.4.3.3 Family income .....	215
4.4.3.4 Material Comforts at home .....	216
4.4.4 Religion and Academic performance .....	217
4.4.5 Birth order, Sibling and Academic performance ..	218
4.4.5.1 Number of Siblings and Academic perfor- mance .....	220
4.4.6 Language mainly spoken at home and Academic per- formance .....	221
4.4.7 IQ and Academic performance .....	224
4.4.8 General health of pupil and Academic performance	226
4.4.8.1 Physical Handicaps .....	228
4.4.9 Absenteeism and Academic performance .....	229
4.4.10 Study and Reading Habits and Academic performance	230
4.4.10.1 Time spent on doing homework .....	230
4.4.10.2 Reading Habits .....	231
4.4.11 Extra-curricular Activities and Academic per- formance .....	234
4.4.12 School transfer and Academic performance .....	236
4.4.13 Choice of Courses and failure .....	239
4.4.14 Teachers' assessment of Pupils' Behaviour Problems	243
4.4.15 Personality Traits and Academic performance ....	244
4.4.16 Pupils' Attitude to School .....	246

## CHAPTER FIVE

5. GENERAL CONCLUSIONS AND RECOMMENDATIONS .....	252 - 273
5.1 <u>LIMITATIONS OF THE PRESENT STUDY</u> .....	252
5.2 <u>DISCUSSION OF THE FINDINGS</u> .....	253
5.2.1 Variables within the Pupils .....	254
5.2.1.1 Variables which relate significantly to Academic performance of boys and girls .....	254
5.2.1.2 Variables which differently influence the Academic performance of boys and girls .....	257
5.2.1.3 Variables which appear to have no signi- ficant relationship to the Academic performance of both boys and girls ....	258



5.2.1.4	Teachers' assessment of pupils' behaviour and personality traits .....	259
5.2.2	Variables extraneous to the Pupils .....	260
5.2.2.1	Variables which relate significantly to academic performance of boys and girls	260
5.2.2.2	Variables which differently influenced the Academic performance of boys and girls .....	261
5.2.2.3	Variables which appear to have no influence on Academic performance of both boys and girls .....	261
5.3	<u>CONCLUSION</u> .....	264
5.4	<u>RECOMMENDATIONS</u> .....	265
5.4.1	The selection function of the Standard V Examination .....	265
5.4.2	The Practical Course .....	266
5.4.3	Underachievement .....	267
5.4.4	Differentiation between Higher Grade and Standard Grade .....	268
5.4.5	To fail or not to fail .....	269
5.4.6	Establishment of Education Record Bureau .....	269
5.5	<u>SUMMARY</u> .....	270
	SELECTED BIBLIOGRAPHY .....	274

A P P E N D I C E S

APPENDIX		PAGE
A	CALCULATION OF CHI-SQUARE STATISTICS .....	282
B	QUESTIONNAIRE - TEACHERS .....	284
C	QUESTIONNAIRE - PUPILS .....	286



LIST OF FIGURES

FIGURE	DESCRIPTION	PAGE
1.1	PERCENTAGE OF PASSES OF WHITE AND INDIAN CANDIDATES IN THE NATAL SENIOR CERTIFICATE EXAMINATION: 1959 - 1967 .....	9
3.1	STANDARD VI RESULTS: 1965 - 1971 .....	127
3.2	PERCENTAGES OF PASS AND FAILURE STANDARD VII: 1967 - 1972 .....	133
3.3	RESULTS OF INTERNAL STANDARD IX EXAMINATION: 1967 - 1972 .....	142
3.4	RESULTS OF EXTERNAL STANDARD VI EXAMINATION: 1958 - 1962 .....	146
3.5	RESULTS OF NATAL JUNIOR CERTIFICATE EXAMINATION: 1953 - 1961 .....	148
3.6	PERCENTAGE OF PASSES IN THE NATAL SENIOR CERTIFICATE EXAMINATION: 1953 - 1962 .....	154
3.7	PERCENTAGE OF PASSES IN THE NATAL SENIOR CERTIFICATE EXAMINATION: 1965 - 1971 .....	158
3.8	HOLDING POWER OF INDIAN SCHOOLS: 1966 - 1970 .....	184

LIST OF TABLES

TABLE	DESCRIPTION	PAGE
1.1	COMPARISON OF AVERAGE MATRIC AND AVERAGE ACHIEVEMENT ACCORDING TO IQ OF FAILURES AT UNIVERSITY .....	29
2.1	FAMILY INCOME OF INDIANS IN NATAL .....	44
2.2	EDUCATIONAL LEVEL OF ADULT INDIAN MALES IN NATAL .....	46
2.3	EDUCATIONAL LEVEL OF INDIAN MEN AND WOMEN ACCORDING TO AGE .....	47
2.4	THE EFFECT OF CONSISTENTLY APPLYING DIFFERENT PASS RATES .....	64
2.5	NUMBER OF PUPILS COMPLETING A 6 YEAR COURSE FOR DIFFERENT FAILURE RATES .....	65
2.6	COMPARISON OF SCHOOLS WITH BEST STD. IX RESULTS AND SCHOOLS WITH WORST STD X RESULTS .....	66
2.7	PROMOTION REQUIREMENTS IN THE INTERNAL EXAMINATION FOR STDS. VII - IX .....	74
2.8	PROMOTION REQUIREMENTS UNDER THE SYSTEM OF STREAMING - STANDARD VII AND IX .....	76
2.9	PROMOTION REQUIREMENTS - JUNIOR CERTIFICATE EXAMINATION .....	79
2.10	NUMBER OF CANDIDATES WHO TOOK EITHER AFRIKAANS OR LATIN IN THE JUNIOR CERTIFICATE EXAMINATION: 1962 - 1965 .....	79
2.11	NORMS OF PERCENTAGE OF CANDIDATES WHO SHOULD FAIL IN THE MATRICULATION SUBJECTS .....	118
3.1	THE RESULTS OF ACADEMIC COURSE STANDARD VI UNDER THE DIFFERENTIATED SYSTEM OF EDUCATION	128
3.2	THE RESULTS OF COMBINED ACADEMIC AND PRACTICAL COURSE UNDER THE DIFFERENTIATED SYSTEM OF EDUCATION .....	130
3.3	FAILURE RATE IN STANDARD VII: 1967 - 1972 ...	131
3.4	RESULTS OF ACADEMIC COURSE STANDARD VII UNDER THE DIFFERENTIATED SYSTEM OF EDUCATION	134
3.5	RESULTS OF ACADEMIC AND PRACTICAL COURSE STANDARD VII: 1973 - 1975 .....	136
3.6	COMPARATIVE PASS AND FAILURE RATE - ACADEMIC STANDARD VI AND VII	



TABLE	DESCRIPTION	PAGE
3.7	DISTRIBUTION OF IQ SCORES OF PUPILS IN STANDARD V PRACTICAL COURSE .....	138
3.8	RESULTS OF STANDARD VIII ACADEMIC INTERNAL EXAMINATION .....	139
3.9	RESULTS OF ACADEMIC COURSE STANDARD IX UNDER THE SYSTEM OF DIFFERENTIATED EDUCATION .....	143
3.10	RESULTS OF STANDARD VI EXAMINATION - COLOUREDS AND INDIANS: 1958 - 1962 .....	
3.11	RESULTS OF JUNIOR CERTIFICATE EXAMINATION : WHITES, COLOUREDS AND INDIANS: 1953 - 1962	149
3.12	RESULTS OF STANDARD VIII EXAMINATION: 1967-1971 .....	151
3.13	RESULTS OF NATAL SENIOR CERTIFICATE EXAMINATION : WHITES, COLOUREDS AND INDIANS: 1953 - 1962 .....	153
3.14	RESULTS OF NATAL SENIOR CERTIFICATE EXAMINATION 1965 - 1971 ADVANCED GRADE .....	160
3.15	RESULTS OF NATAL SENIOR CERTIFICATE EXAMINATION 1966 - 1971 ORDINARY GRADE .....	161
3.16	RESULTS OF SENIOR CERTIFICATE EXAMINATION: 1973 - 1974 .....	163
3.17	SUBJECT FAILURES IN THE SENIOR CERTIFICATE EXAMINATION 1972 - 1974 .....	164
3.18	RATIO OF BOYS AND GIRLS FAILING IN THE VARIOUS SUBJECTS IN THE SENIOR CERTIFICATE EXAMINATION .....	166
3.19	RESULTS OF SENIOR CERTIFICATE EXAMINATION UNDER THE NEW SYSTEM OF DIFFERENTIATED EDUCATION .....	169
3.20	PERCENTAGE OF PASS AND FAILURE IN INDIVIDUAL SUBJECTS - SENIOR CERTIFICATE EXAMINATION .....	171
3.21	PUPILS WITH IQ RANGE OF 101 - 131+ IN THE PRACTICAL COURSE .....	180
3.22	ELIMINATION OF SECONDARY PUPILS IN NATAL ..	185
4.1	DISTRIBUTION OF INDIAN SECONDARY SCHOOLS IN NATAL .....	
4.2	DISTRIBUTION OF SAMPLE SCHOOLS USED IN THIS STUDY .....	190

TABLE	DESCRIPTION	PAGE
4.3	BREAKDOWN OF PUPILS IN THE COHORT OF STANDARD VIII IN THE SAMPLE SCHOOLS :.....	194
4.4	CALCULATION OF CHI-SQUARE - EXAMPLE .....	203
4.5	TEACHERS' RESPONSE TO PUPILS' BEHAVIOUR	204
4.6	ACADEMIC PERFORMANCE ACCORDING TO SEX OF PUPILS .....	206
4.7	AGE AND ACADEMIC PERFORMANCE .....	207
4.8	ANALYSIS OF FATHERS' OCCUPATION .....	209
4.9	SOCIO-ECONOMIC STATUS AND ACADEMIC PERFORMANCE .....	210
4.10	PARENTS' LEVEL OF WESTERN EDUCATION AND ACADEMIC PERFORMANCE .....	214
4.11	FAMILY INCOME AND ACADEMIC PERFORMANCE ...	215
4.12	PUPILS WITH OWN ROOMS AND PUPILS WHO SHARE ROOMS AND ACADEMIC PERFORMANCE .....	217
4.13	RELIGION AND ACADEMIC PERFORMANCE .....	218
4.14	BIRTH ORDER AND ACADEMIC PERFORMANCE.....	219
4.15	NUMBER OF BROTHERS AND SISTERS AND ACADEMIC PERFORMANCE .....	222
4.16	ACADEMIC PERFORMANCE AND LANGUAGE SPOKEN AT HOME .....	224
4.17	IQ SCORES OF BOYS AND ACADEMIC PERFORMANCE	225
4.18	IQ SCORES OF GIRLS AND ACADEMIC PERFORMANCE	225
4.19	HEALTH AND ACADEMIC PERFORMANCE .....	227
4.20	PHYSICAL HANDICAPS AND ACADEMIC PERFORMANCE	228
4.21	ABSENTEEISM AND ACADEMIC PERFORMANCE .....	229
4.22	NUMBER OF HOURS SPENT ON HOMEWORK AND ACADEMIC PERFORMANCE .....	230
4.23	REGULARITY IN READING NEWSPAPERS AND ACADEMIC PERFORMANCE .....	231
4.24	REGULARITY IN READING MAGAZINES AND ACADEMIC PERFORMANCE .....	232
4.25	USE OF LIBRARY AND ACADEMIC PERFORMANCE .	233
4.26	EXTRA CURRICULAR ACTIVITIES AND ACADEMIC PERFORMANCE .....	



LIST	DESCRIPTION	PAGE
4.27	NUMBER OF TIMES TRANSFERRED FROM ONE SCHOOL TO ANOTHER AND ACADEMIC PERFORMANCE	236
4.28	NUMBER OF TIMES TRANSFERRED FROM ONE SCHOOL TO ANOTHER AND ACADEMIC PERFORMANCE STANDARD VII TO VIII .....	237
4.29	RESULTS OF SUBJECTS TAKEN ON THE HIGHER GRADE : 1974 .....	241
4.30	RESULTS OF SUBJECTS TAKEN ON THE STANDARD GRADE .....	242
4.31	WEIGHTED MEAN - BEHAVIOUR .....	243
4.32	WEIGHTED MEAN - PERSONALITY .....	245
4.33	REASONS FOR ATTENDING SCHOOL .....	246

A STUDY OF FAILURE IN SCHOOL WITH SPECIAL REFERENCE  
TO INDIAN SECONDARY EDUCATION IN NATAL

CHAPTER ONE

1. THE PURPOSE, SCOPE AND SIGNIFICANCE OF THE PRESENT STUDY

1.1 INTRODUCTION

This is a study about an educational problem - the problem of *failure* at school. Perhaps the most fundamental aspect is that the problem of *failure* at school is rarely, if ever, attributable to one simple cause. Rather, there is always a multiplicity of interrelated and interacting factors. As schools draw more and more children the range of differences in ability which the school must accommodate broadens. As society becomes increasingly technological, the personal and social consequences of *failure* offer great challenges to educators.

A striking feature of the post-war educational scene in Natal has been the phenomenal growth in population in Indian education - especially in secondary education.

In 1939 there were 25 081 Indian children in schools in Natal. Of this number there were only 429 or 1,7% in the secondary classes. In 1945 the school population rose to 34 166 pupils of which 876 or 2,6% were secondary school pupils<sup>(2)</sup>. During the period 1945 to 1975 the school population increased by 96 265 pupils an increase of 73,8% and during the same period the number of secondary pupils increased from 876 to 14 900 pupils - an increase of 160%<sup>(3)</sup>. Commenting on the sharp increase in the demand for secondary education





by Indian pupils, a former Chief Inspector of Indian Education in Natal reported:

"One wonders if the Indian parent ..... does not regard secondary education as a panacea for his ills. Around him he sees large numbers of European children who proceed to post-primary classes, and he reasons that if this system brings economic and other advantages to the white races it must be good for the adolescents of his own people"<sup>(4)</sup>

Whether this tremendous growth in the school population was inspired more by social and economic pressures than by any real motivation about the fundamental value of education is a moot point. In our highly competitive and success oriented society, where sifting and selection takes place, taking one boy and leaving another,<sup>(5)</sup> the problem of *failure* is of special significance for those concerned about the inequality of opportunity which is characteristic of competition, and about the short-term emotional costs which *failure* at school may involve for some individuals<sup>(6)</sup>. The problem of *failure* at school has been the focus of numerous researches, but little attention has been given to the problem of *failure* in Indian education. The Indian educational scene in this country has certain novel features. Of socio-economic factors in the Indian community we may know something, but of their implications for education, we know very little.

The present study was inspired primarily, by the need to provide some kind of empirical framework, within which some of the complexities of the process of *failure* in school can be conceptualised<sup>(7)</sup>.

## 1.2 DEFINITIONS AND ASSUMPTIONS

Failure is a relative term and much depends upon definition. At one extreme, we have a concept based on scholastic criteria, sometimes even upon performance in a few basic tool subjects like reading and arithmetic. This is a narrow view. On the other extreme, is the view that any criteria of *success* and *failure* must include at least the main intellectual and personal aspects of growth. This broad view accepts the fact that there may be *failures* and *successes* in the same child and at the same time - as, for example, when a child's social and moral development are markedly retarded for his age, while his performance in skill subjects is above the norm<sup>(8)</sup>.

According to Banks and Finlayson<sup>(9)</sup>, the task of defining precisely what we mean by *success* and *failure* is a "difficult exercise in view of the fact that schools are supposed to be concerned with many aspects of the child's progress, although some of these tend to be rather vaguely defined and difficult to assess, for example, social development."

Gulliford<sup>(10)</sup> in attempting to define backwardness and educational failure says that the term *backward* is usually used to refer to children who are not keeping up with their age group in school work, although it may also refer to a lag in mental or general development. Thus a child of ten with a reading age of eight is two years backward in reading." In using *retardation* for educational failure, Gulliford defines *failure* as "a marked discrepancy between a child's educational achievements and his ability,



as judged by intelligence tests or his general performance in everyday affairs or non academic aspects of school."<sup>(11)</sup>

Schonnel defines *failure* as:

"School failure is a process of increasing discrepancy between a child's behaviour and achievements and the expectations set up by environment including the school."<sup>(12)</sup>

Behr<sup>(13)</sup> in discussing underachievement defines *failure* as :

"Success is said to occur when *actual* attainment exceeds *predicted* attainment, and underachievement when the *actual* attainment drops below the *predicted* level".

According to Fontini and Weinstein<sup>(14)</sup> the educational process proceeds on the assumption that the basically academic subject matter must be mastered before the student can be considered to have been educated. The learner who is unable to meet these academic requirements - that is - to master the content at a prescribed rate - is considered to be a *failure* and is not permitted to proceed up to the graded hierarchy.

The Department of Indian Affairs prescribes a detailed programme of studies for the various standards. Such programmes specify, from time to time, for each standard or grade, the material which must be taught and the standard of mastery which must be attained by the pupils at the end of each school year. The normal pupil is expected to progress from one class or standard to the next higher class or standard each year. *Failure* is indicated by the pupil's inability to master the year's work and he thus repeats that year's work in the following year.

The decision to fail or promote a pupil up to and including the

Standard IX level is taken by the school principal and the inspector of education in terms of the promotion and retardation rules in force from time to time.

In summing up the definitions of *failure*, it soon becomes evident that *failure* is a relative term and much depends upon its definition. Generally definitions of *failure* reflect educational philosophies and notions of what constitutes educational growth.

For the purpose of this study, a narrower and more pragmatic view of *failure* is taken i.e. *the success or not of pupils in a class or standard, measured in terms of whether they have met the minimum requirements for promotion into the next higher class or standard.*

### 1.3 THE BACKGROUND TO THE STUDY

In a success orientated and competitive society, where the level of school education has associated with it many important vocational and financial consequences for the individual<sup>(15)</sup>, the problem of *failure* in school is of grave concern not only for the individual, but also for society as a whole.

Arising out of this concern, UNESCO convened a conference in Hamburg in 1952 on Education and Mental Health. Flowing from this Conference, there appeared a decade later (in 1962), a comprehensive report called *Failure in School - An International Study*. In its opening remarks the Report states:

"There is probably no school system in the world which is not, in one way or another, concerned about a proportion of pupils who fail".<sup>(16)</sup>



In another study in 1966 by UNESCO, which examined the problem of *failure* and *drop-out* in primary education in 21 countries, including 9 in Asia, the conclusion was that in countries which have a high percentage of children repeating a standard, the *drop-out* rate is also high.<sup>(17)</sup> Children who repeat a standard do not always remain in school to complete the repeating standard but leave school. Langeland<sup>(18)</sup>, in discussing aspects of *failure* commented:

"It is no use trying to deny that in a great many countries the problem of school failure has become an alarming phenomenon, throwing shadows of despair into the hearts of pupils and parents and of guilt into the minds of educators."

In the United States the Coleman Report (1968)<sup>(19)</sup>, and in Great Britain the Plowden Report (1967)<sup>(20)</sup>, both examined the problem of school achievement. Both these reports were concerned about the inequality of opportunities, and the resultant effect on academic performance.

In South Africa, the problem of school *failure* has been the focus of numerous reports, seminars and research studies.<sup>(21 22 23 24)</sup>

In 1965 the Human Sciences Research Council undertook a large scale project known as the Project Talent Survey. In this survey 69 908 Standard VI pupils (51,1% boys, 48,9% girls) from 832 White schools in the country were subjected to a battery of tests and questionnaires. Follow-up studies were undertaken when these children reached Standard VIII and Standard X, i.e. 2 and 4 years later, and further follow-up studies were also contemplated. Some of the pertinent findings were:<sup>(25)</sup>

29,3% of the pupils had failed at least one year at school, and of this number 8,5% two or more years.

2,4% of the pupils were classified as intellectually superior, with an IQ stanine of 9 or IQ score of 127 + on the NSAGT. Of this group 0,8% failed at school: 0,7% once, 0,1% twice.

The allied problem of *failure* and *underachievement* was the focus of attention in Durban recently. In 1974 the Faculty of Education of the University of Durban-Westville convened a National Conference on the Underachieving Child. Addressing the delegates to this Conference, Professor A.L. Behr, the Dean of the Faculty, drew attention to the problem of *failure*. He said:

"..... the problem of school failure will have to engage the attention of educators in South Africa to an extent far greater than has been the case hitherto."<sup>(26)</sup>

### 1.3.1 The Indian Community's Concern about the High Failure Rate in Indian Education

During the last two decades, the high *failure* rate in Indian education, especially in the Senior Certificate examination, has caused great concern among the Indian community. The position reached a critical point in 1967, a year after the control of Indian education was transferred from the Natal Education Department to the Department of Indian Affairs. At the time of transfer of Indian education, the Natal Education Department still controlled the Senior Certificate examination for Indian candidates in Natal.

In 1967, 66% of the Indian candidates who wrote the Natal Senior Certificate examination failed.<sup>(27)</sup> Perturbed at this high *failure* rate the South African Indian Teachers' Association issued a statement on 5 February 1968. In the opening remarks the statement says:



"This high incidence has caused alarm and the Indian Community is gravely disturbed"<sup>(28)</sup>. The statement goes on to trace the trend in the Natal Senior Certificate examination results from 1959 to 1967 of both European and Indian children. These performances are illustrated graphically in Figure 1.1.

The statement analyses the position and says that two things become clear.

- (i) the European attainment is consistently at the 80% level;
- (ii) in contrast, the Indian attainment shows fluctuation and a decline after 1961.

In demanding an inquiry into the high incidence of *failure* among Indian candidates, the Association stated:

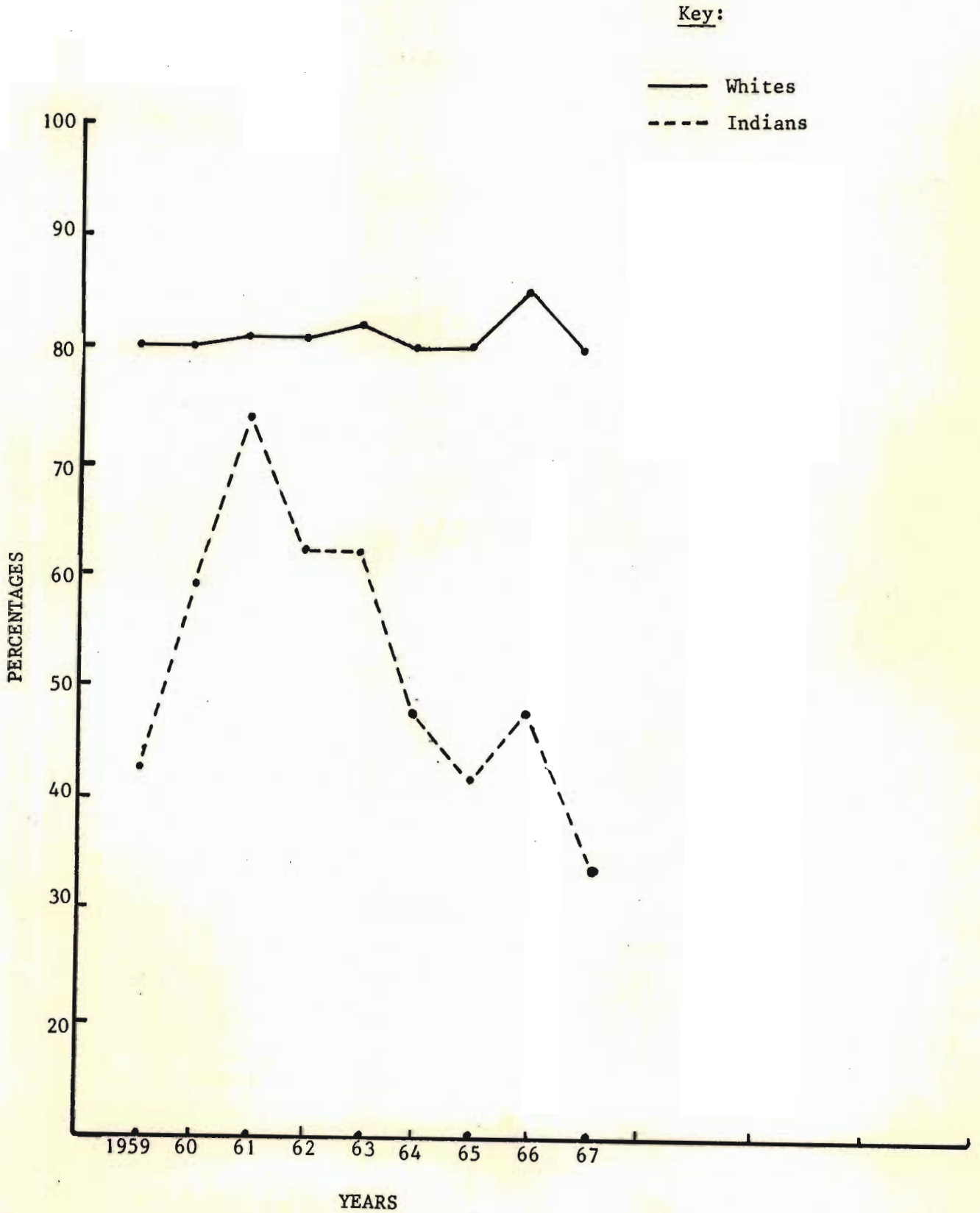
"The sixty percent failure rate has created the impression that the large majority of Indian pupils are intellectually incapable of succeeding in the Advanced Grade Examinations. That this impression is an erroneous one becomes clear from a careful analysis of the real situation."<sup>(29)</sup>

The South African Indian Teachers' Association then suggests certain reasons for the gap between European and Indian performance. Some of these, according to the statement, are:<sup>(30)</sup>

- the lack of streaming in Indian schools;
- Latin as a second language for the great majority of Indian candidates ;
- the platoon school and its effect on high school performance;
- The population shift and the consequent problem - such as adjustment to new environment and new schools;
- abnormal pupil loads in the classroom;
- lack of suitably qualified teachers, especially university graduates;

FIGURE 1.1

Percentage pass rates of White and Indian candidates in the Natal Senior Certificate Examination: 1959-1967





In May 1972, Mr. A. Pyper, M.P. raised in Parliament, the question of the high *failure* rate among Indian candidates in the Natal Senior Certificate examination. He also called for a full investigation into the causes for the poor Senior Certificate examination results that are annually achieved by Indian pupils. On this occasion Mr. Pyper remarked.

"..... when we compare the results achieved in Bantu education with those achieved in Indian education, one is absolutely shocked and amazed."<sup>(31)</sup>

According to a newspaper report, an irate parent commenting on the poor examination results in 1971 had this to say:

"Our Indian teachers in high schools are now better qualified and receive better salaries and teaching equipment and classroom conditions are now far better than those in the olden days. We are beginning to wonder if the fact that the Matriculation examination is conducted on racial lines has anything to do with more Indian failures than white failures."<sup>(32)</sup>

"It is most important that the reasons for the many failures are pinpointed as quickly as possible. As it is hard to imagine that an Indian student is in any way inferior in intelligence to his White counterpart, an investigation will show where the fault lies."<sup>(33)</sup>

#### 1.4 THE PURPOSE OF THE PRESENT STUDY

The lack of reliable research findings on the problem of *failure* in Indian schools has given rise to many speculative reasons for the high incidence of *failure* among Indian pupils.

Addressing a local Indian teacher's conference in 1969, the Principal Indian Social Worker of the South African National Council for Child Welfare <sup>(34)</sup> commented:

"Of socio-economic features in the Indian population of this country we may know something, but of their implications for Indian education we have little available research material on which to base any conclusions or generalisations."

The purpose of this study is to investigate the problem of *failure* in Indian secondary education in Natal.

In order to undertake this investigation the author will:

- (a) review pertinent literature in order to appraise the findings of other researchers in this field;
- (b) trace the history and development of Indian secondary education in Natal with special reference to examination, promotion and retardation procedures;
- (c) analyse the extent and incidence of *failure* in Indian secondary education from 1954 to 1974, specially in Natal.
- (d) statistically analyse data obtained from questionnaires to find if there is any relationship between *failure* and a number of variables, *inter alia*:
  - socio-economic factors,
  - intelligence,
  - absenteeism,
  - choice of subjects taken by the pupils,

The method and procedure will be outlined in Chapter 4.



#### 1.4.1 Assumptions and Limitations

Ideally, the present researcher would have liked to study the role of the school in pupil performance - for it is in the school, where *success* and *failure* take place. According to Getzels and Thelen<sup>(35)</sup> the school or the classroom is a social institution, and it is within this social system that several factors interplay which may influence a pupil's academic performance. But this aspect is beyond the scope of the present study. Therefore, no attempt will be made to control or even investigate class differences in content or teaching methods, since the primary purpose of this investigation was to study *failure per se*.

*Success* and *failure* are defined in relation to academic achievements, as measured by the results of the schools' internal examinations or other method of evaluation, and the external examinations conducted by an outside body. In the case of Indian education, at present the Division of Education, Department of Indian Affairs is the external examining body. The present study, therefore, proceeds on the assumption that each school's method of internal examination or other method of evaluation, is a valid evaluative instrument, based on the minimum promotion and retardation requirements as set out in the rules of the examinations procedure of the Department of Indian Affairs.

#### 1.5 THE PROBLEM OF FAILURE AND RELATED MATTERS

The problem of *failure* in school has been the focus of numerous researches, and the topic of many government reports; yet there is no conclusive understanding of the complexity of the problem.<sup>(36)</sup>

Van der Walt<sup>(37)</sup> carried out a comparative study of the problem of *failure* in 1962 and he commented:

"Talle ondersoekers het dan ook die probleem van druiping nagevors. Daar is gevind dat in byna alle gevalle daar nie net 'n enkele oorsaak is nie maar 'n hele struktuur van oorsake."

The following is a review of some aspects of research findings on the problem of *failure* at school:

#### 1.5.1 Socio-Economic and General Environmental Factors

Commenting on the influence of environmental factors on academic performance, a UNESCO Report<sup>(38)</sup> stated:

"It is axiomatic in modern child psychology that environmental factors shape, facilitate or inhibit growth in many subtle ways as yet imperfectly understood."

Learning is directly or indirectly influenced by factors outside the classroom: some of them operating immediately others more remotely, at least in time.<sup>(39)</sup>

Several studies, *inter alia*, Ames<sup>(40)</sup> Chopra<sup>(41)</sup> Miner<sup>(42)</sup> Davies and Coombs<sup>(43)</sup> Coleman<sup>(44)</sup> Havinghurst<sup>(45)</sup> Deutch<sup>(46)</sup> Finlayson<sup>(47)</sup> Birch and Gussow<sup>(48)</sup> Kathleen Cullen<sup>(49)</sup>, show positive relationship between socio-economic background and academic achievement.

Reviewing earlier research findings, Chopra<sup>(50)</sup> states that in some studies this relationship holds good, even when measured intelligence is held constant. In his study, Chopra used 433 science pupils, (age range 15-17 years) randomly selected from sixteen boys' secondary schools in Lucknow, India. He found that the mean marks scored by the pupils in the higher socio-economic group were significantly



higher than those of the pupils from the middle and the lower socio-economic groups. The differences between the middle and the lower socio-economic groups, however, did not reach the level of significance. There was a positive relationship between socio-economic background and achievement in English, mathematics and science; but achievement in Hindi, biology and art was relatively free from the influence of socio-economic background. The pattern of relationship between socio-economic background and achievement was the same at all the three intellectual levels of ability. In his study Chopra used the Progressive Matrices Test. This is a non-verbal test where the problems are arranged in order of increasing difficulty within each set, so that the relatively easy solution to the first item helps to show the testee the way in which the more difficult problems are to be answered. By itself, it is not a test of general intelligence but used in conjunction with a vocabulary test, it is a useful test for general intelligence. In Chopra's study, pupils with percentile rankings of above 75 were regarded as having above the average intelligence, those with percentile rankings of 26 to 75 were regarded as having average intelligence and those with percentile rankings of 25 and below were regarded as having below the average intelligence.

Fathers' occupation was taken as the indicator of socio-economic background. Pupils whose fathers belonged to the professional, administrative, executive and managerial occupations were placed in the upper socio-economic group. Those pupils with parents belonging to clerical, skilled workers, minor business and sales workers were placed in the middle socio-economic group. The pupils with parents belonging to unskilled workers or the farming group were placed in the lower socio-economic group.

Why did the differences between the mean scores of the pupils from the middle and the lower socio-economic groups not reach the level of significance? The answer probably could be attributed to the fact that there is greater selection of pupils in the lower socio-economic group. In India, there is considerable dropping out of the schools as the pupils move up the educational ladder. Thus from the lower socio-economic group those reaching the high school level are generally the better motivated pupils.

This is an interesting study to replicate in the South African Indian context. In the absence of full compulsory education for Indians in South Africa, those students from the low socio-economic group who remain at school longer to complete the Senior Certificate level of education are presumably those that are highly motivated.

Chopra's findings do not agree with those arrived at by Curry<sup>(51)</sup> who contended that high intellectual ability offsets any deficiency which may be created by lower socio-economic conditions.

In another study by Hess and Shipman<sup>(52)</sup>, who investigated the cognitive environment of 163 urban four-year old Black children in the United States, found significant class differences in socialisation practices of children, that seemed to have serious consequences for cognitive growth and educability. The structure of the social class and the family, was reported to shape communication and language, which in turn shape thought and cognitive styles of problem solving.

In an excellent summary of the relationship between sociological



background and school achievement, Betty Miner<sup>(53)</sup> found that exposure to different types of stimuli outside of the school environment does produce different levels of performance, independent of ability.

Chowdhury<sup>(54)</sup> investigated the problem of failure and drop-out in primary schools in the district of Paraganas, Calcutta, in 1965. He also found that economic factors, in particular poverty, appear to be among the main causes of drop-out and failure in schools.

Kellmer Pringle<sup>(55)</sup> on the basis of an inquiry carried out in England from 1954 to 1961 among children from 4-14 years of age, found that the incidence of school failure was high in an intellectually under-privileged environment.

It is a common observation from pertinent literature, that cultural and social disadvantages prevent some obviously able children from the full utilization of their abilities. Gulliford<sup>(56)</sup> is of the opinion that poor achievements of many slow learners are due as much to the limitations of their cultural background, as to the limitations of ability. Moreover, deprivations, according to Gulliford, influence not only attainment but also the development of abilities themselves.

In another investigation into the sociological correlates of child behaviour, Clausen and Williams<sup>(57)</sup> found that social background - which includes culture, social differentiation, social class, parental occupation and family structure - influences academic performance.

A study of the effects of a child's social relationships and his physical and cultural background on school attainment was undertaken by Kathleen Cullen<sup>(58)</sup> in 1969. She found, *inter alia*, that

educationally retarded pupils tended to come from poor socio-economic areas.

In a survey, Coleman, et al<sup>(59)</sup> found that students' school achievement was correlated most highly with the group of factors consisting of home, family background and socio-economic status. Havinghurst<sup>(60)</sup> found that for every high school drop-out from the upper and upper-middle classes there were about 32 from the upper-lower and lower-lower classes. Moreover, 15 students entered college from the two top social classes for every one from the two lower classes. Havinghurst says:

"Economic deprivation, cultural isolation and ethnic segregation have not fostered the motivation and background needed for normal success in the general school system."

Literature abounds in the effects of cultural deprivation on academic performance. How does intellectual development depend upon external influences? In what respects is it a series of unfolding maturational states? According to Bruner<sup>(61)</sup>, "there is no psychological phenomenon without a biologically given organism nor one that takes place outside an environment". In discussing the culturally disadvantaged, Kneller<sup>(62)</sup> says:

"In short, the disadvantaged may be said to be those who live mostly outside the dominant culture and who, by race, religion, sex or other characteristics, find themselves handicapped in an educational system controlled by the values of the dominant culture."

Ashbell<sup>(63)</sup>, in discussing the disadvantaged, says that the meaning of the disadvantaged must include all those who are blocked in any way from fulfilling their human potential. Cultural deprivation may



be seen as a *failure* to provide an opportunity for infants and young children "to have the experience required for adequate development of those semi-autonomous central processes demanded for acquiring skill in the use of linguistic and mathematical symbols, and for the analysis of causal relationship."<sup>(64)</sup>

In an analysis of the effects of the environment on scholastic achievement, Ashbell<sup>(65)</sup> states:

"The slum child is a child of another world, our laws do not bind him, our standard middle class ambitions do not inspire him." A child from this type of environment generally falls far behind in his class as the years go by. By high school age he is more than likely to drop-out of school, headed for chronic employment, "disdaining the outside middle-class world that is already disdaining him, secretly contemptuous of himself; a waste of a human being - a *failure*."<sup>(66)</sup>

In discussing poverty and childhood, Bruner<sup>(67)</sup> says that our system of education limits and starves, the capabilities of the children of the poor by "leading them into failure until they are convinced that it is not worth their while to think about school-like things." How does poverty aggravate educational *failure*? According to Birch and Gussow<sup>(68)</sup>, children who live in poverty, live lives which are not merely "intellectually depressing but physically destructive". Poor children are exposed to poor food, poor sanitation, poor housing and poor medical care. To be poor is to be assailed by a

whole range of physical conditions which, by endangering life, growth and health, depress mental development and educational potential.

These two writers conclude by saying:

"A serious attack on school failure must be an attack on the life conditions which characterises poverty wherever it is found."<sup>(69)</sup>

Jensen<sup>(70)</sup> says that one of the crucial psychological differences between low and middle socio-economic status children is in the spontaneity of verbal mediation, especially in ostensibly non-verbal learning or problem-solving situations. In short, low socio-economic status children are much less likely than middle socio-economic status children to talk to themselves as an aid to "thinking". In this study Jensen compared children of low socio-economic status with middle and upper class children on a variety of associative learning tests.

In recent years, the problem of *underachievement* has engaged the attention of educationists. What do we mean by an *underachiever*? Bricklin and Bricklin<sup>(71)</sup> define an *underachiever* as a child whose day-by-day efficiency in school is much poorer than would be expected on the basis of his intelligence. Thorndike<sup>(72)</sup> defines *underachievement* "as the discrepancy of actual achievement from some predicted value based on the regression equation between aptitude and achievement". According to Behr<sup>(73)</sup> *underachievement* occurs when the *actual* attainment *drops below* the *predicted* level.

Naylor<sup>(74)</sup> cites Lavin as maintaining that labelling of some school performances as *underachievement* or *overachievement* unfortunately tends to suggest that ability is the sole basis for predicting achievement. That an estimate of ability is a necessary piece of information, is beyond dispute; but that it is an inaccurate predictor is also beyond question. Given this inaccuracy in prediction, we should not be surprised to find wide individual differences in per-

formance at the same ability level.

Naylor goes on to cite Carmical's study to discriminate *normal achievers* and *underachievers* in terms of aptitudes, vocational preferences, values and temperament. An *underachiever* was defined for the purpose of the study, as a pupil whose I.Q. on the Otis Intelligence Test was between 110-125, and whose scholastic ranks were in the limits 2.0 to 2.9 (apparently within a total performance range of 2.0 to 5.0). In his results, Carmical found that his two groups were significantly differentiated on the verbal and numerical ability subtests of the Differentiated Aptitude Tests.

In an interesting study Kellmer Pringle<sup>(75)</sup> studied some very intelligent children whom she dubbed as *able misfits*. She found for example that children with an average I.Q. of 130 attained several years below their mental age in reading, spelling and arithmetic. When comparisons were made between educational and mental age levels, the standard of the great majority was found to be two or more years below their own mental capacity. Thus she found that the extent and degree of *underfunctioning* or *underachievement* was considerable.

In a paper on "The Intelligent School Failure" Ethel Bartlett<sup>(76)</sup> says that it was very often the most intelligent children who were school failures. She found in a study of 715 children who were regarded as *underachievers* that 135 of these children had intelligence quotients between 130 and 139, and 73 were above 140, with several in the 150's and 160's.

While agreeing that intelligence is no longer thought of as something inborn and unalterable, she says that "the fact was these children often have a very high effective and operational intelligence - the product of innate intelligence and environment. They were lively,



acute and interested in conversation, and often informed and adult. And yet they failed at school". (77)

According to the Commission of Enquiry into Universities, (78) which considered the high rate of *failure* among first year students at South African Universities, students have problems of social adjustment and other emotional problems that may become "so serious as to result in failure, even where they have intellectual capacities of the highest order."

The logical problems in the notion of *underachievement* are reflected in the concept of *overachievement*. In general, *overachievers* are defined as pupils whose school attainment is in excess of expectations formed on the basis of their ability. In this case, obviously, we would not say that such pupils ought to be performing in accordance with their ability, since an overriding concern of both teachers and educational psychologists is the maximisation of performance. (79)

Naylor argues that the concept of *overachievement* does suggest that there are variables in addition to ability which have positive effects on performance. (80)

In suggesting a theory of *underachievement* and *overachievement* Taylor (81) says that there are seven "traits" which were significantly related to achievement. These are:

- (i) the *overachiever* has positive feeling of self-worth, whereas the *underachiever* is poorly adjusted and lacks self-confidence;

- (ii) the *overachiever* has less anxiety than the *underachiever*, and has greater self-control which would enable him to direct his anxiety to constructive ends;
- (iii) conformity to authority is more characteristic of the *overachiever* than the *underachiever*;
- (iv) the *overachiever* is more concerned with social acceptance than the *underachiever*, and tends to have positive relations with peers;
- (v) the *overachiever* tends to have less conflict over issues concerning dependence and independence than the *underachiever*.
- (vi) the *overachiever* is academically rather than socially oriented in his activities;
- (vii) the *overachiever* is more realistic in his choice of goals than the *underachiever*.

In a paper presented at the National Conference on the Underachieving Child, held in Durban in 1974, Behr says:

"Underachievement ..... is usually rooted in personality problems which are not always overtly expressed and therefore are not discerned by, nor elicit prompt reaction from teachers."<sup>(82)</sup>

In terms of the studies reviewed here, it is clear that individual differences in school achievement cannot be reduced to individual differences in the intelligence of pupils. *Underachievement* suggests that a potential indicated by ability is not being realised and that factors which militate against its realisation are indeed complex.

#### 1.5.2 The Other View

While literature abounds in evidence showing a positive relationship between poor academic performance and socio-economic background, there is also much evidence to suggest that socio-economic factors are



being used merely as an excuse by both pupils and teachers. According to Peter Wilby<sup>(83)</sup> a London correspondent of the *Natal Mercury*, poor teaching is largely to blame for failure. He reported: "Notions that thousands of working-class children have crippling linguistic, social and cultural "deficits" that the schools are helpless to tackle are being discredited."

Wilby cites a London report as saying that:

"The teacher who uses poor social conditions as an excuse for poor teaching is the cause of greater deprivations than the home background itself."<sup>(84)</sup>

Even the Plowden Report on Primary Education<sup>(85)</sup> says that socio-economic factors "accounted for only 9% of the variance in individual performance of primary school children". Beez<sup>(86)</sup> cites several studies which show that the teacher's expectation of his pupils can influence his teaching. Beez attempted to show how a teacher's expectation becomes translated into behaviour in such a way as to elicit the expected pupil behaviour. In his study he found that teachers who had been given favourable expectations about a pupil tried to teach more symbols than did the teachers who were given unfavourable expectations<sup>(87)</sup>. The findings of Beez are confirmed by Rosenthal and Jacobson<sup>(88)</sup> who say that teachers act differently, depending upon their expectations for the child. When they expect the child to perform poorly they attempt to teach less.

As a former high school teacher, the present writer is well aware of the staff-room comments made by teachers about their pupils. Children coming from such poor socio-economic areas as the former Magazine Barracks, Cato Manor, Clairwood and Chatsworth areas were



branded as *failures*. By their very negative attitudes towards these supposedly "stupid" children, the teachers destroyed all the curiosity in the children. As long as the teachers were able to blame the pupils' *failure* on their poor socio-economic background, indifference and poor teaching went unnoticed.

Holt<sup>(89)</sup> in this respect says that, to a very great extent, school is a place where children learn to be stupid. "Children come to school curious; within a few years most of that curiosity is dead, or at least silent."

Social class or the socio-economic factor *per se* does not in itself account for poor scholastic achievement - what matters is not the social class from which the person originates, but rather, it is the characteristics of the person and his social environment that influence his attainment.<sup>(90)</sup>

From a phenomenological point of view, the child does not only passively conform to environmental influences, but he also actually intervenes in the environment and changes it.<sup>(91)</sup> In other words the poor environment does not in itself imply poor intellectual endowment to such an extent that the individual is left helpless to rise above his poor surrounding.

The existentialist point of view is that the "free choice of an act involves a personal responsibility for the commission." If the child lacks self motivation to learn, then the child must be made to realise that he cannot be shielded from the consequences of failure. "Nor must he blame his weakness or mistakes on the infirmity of his environment, on his family, on bad advice or on human nature"<sup>(92)</sup>.

According to Burt it was common, at one time, to place the chief blame both for intellectual dullness and for moral depravity on poverty.

In an analysis he made of the situation in London, he found that, in the general population, only 7% fall below the poverty-line.

"Applied to the whole of the country, however, 7% implies a large number : 30 000 boys and girls were found to be living in the most unfavourable surroundings, and yet making perfectly normal progress in their school work. Bunyon, Burns, Faraday and Lincoln - these and many other geniuses have shown by their lives that a man may rise to intellectual eminence despite all the drawbacks of a poverty-stricken youth." (93)

### 1.5.3 Economic or Material Circumstances of the Family

According to a UNESCO Report on failure, the child's own family is an important factor in academic performance. The Report cites several studies from almost every country, which show that factors which affect the qualities of family life also affect the child's learning. (94) The affective relationship between the child and his parents, the concern which the parents show for the child's welfare, the consistency or otherwise of discipline and in consequence, the atmosphere of security in the home, are all of great importance in the education of the child, says the UNESCO Report.

Several other studies consulted, Cullen (95), Golden and Birns (96), Jensen (97), Burt (98), Sinha (99), Summershill (100), Douglas (101), Birch and Gussow (102), all show a relationship between familial factors and academic performance. Behr (103) says that the absence of books or a suitable place to do homework, may interfere with the



child's ability to maintain the standard of academic performance of which he is capable.

A Schools' Council Research Project, at the School of Education of the University of Manchester, which studied 2 300 primary school children, found that the home factors were more closely related to scholastic attainment than were school variables. (104)

In another study, Majorie Ainsworth and Batten (105) found that considerations such as family discussion on school progress, discussion of school reports, the nature of books bought for children, provision for children to store their own books, parent's formal educational level, and nature of radio listening, correlated significantly with both primary and secondary school attainment.

Parental indifference to education appeared to be among the main causes of *failure* and *drop-out*. This was borne out in an investigation by Chowdhury (106) in Calcutta.

Miller (107) cites the Plowden Report as saying that parent's attitude to the education of their children accounted for 20% of the reasons for school failure. The criteria of parents' attitudes included age at which they wished their children to leave school, their initiative in visiting school, in talking to heads and class teachers, interest in children's homework, time spent with children in evenings and general literacy of the home as measured by the kinds and amount of reading and library membership.

Some writers postulate that, the type of language spoken in lower class families causes difficulty in children's learning at school.



According to Bruner<sup>(108)</sup> knowledge is represented by knowing how to do something. This is then "supplemented by a system of ikonic representation in which serially ordered events and actions are now rendered in simultaneous form in imagery. Finally, a third component is added - symbolic representation, in which experience is now enclosed in the more powerful notation of language with its rules not only for representing but also for transforming experience".<sup>(109)</sup>

Of all the environmental factors differentiating the lower class child from the middle class child, language appears to be the most important as far as learning is concerned<sup>(110)</sup>. Behr<sup>(111)</sup> asserts that there is a close link between language and thought, particularly the kind of abstract thought that our educational systems demand.

In another investigation Bernstein<sup>(112)</sup> found that there are two types of language - "restricted" and "elaborate". Working class speech says Bernstein, is characterised by a restricted style that is stereotyped and condensed. Sentences are short, dependent clauses are few, vocabulary is small, and gestures are enormously used in addition to or in place of speech. Moreover, this type of speech lacks in precision and is composed of cliches that are readily understood by the listener. The elaborate code, used by the better educated middle class is more specific, precise, individualised and flexible. Since children tend to internalise the spoken language of their home environment, especially that of their parents, the lower class child comes to acquire at home an inferior set of verbal techniques to his own learning at school. Whereas the middle-class child has merely to develop his linguistic skills, the lower class child has to change them. This makes it very difficult for the latter to schematize the learning which the teacher expects, since it is presented to him in the elaborate code and form of speech which is unfamiliar to him. Consequently

the learning among these children will tend to be mechanical.

The lack of adult source of information which the child from the lower class experiences, has a marked effect on his language development. Whereas middle-class children are generally brought up in homes where conversation, reasoning, questioning and explaining are continuously going on, lower class children do not often enjoy these advantages. (113)

According to Deutsch<sup>(114)</sup>, if questions are not encouraged, or if they are not responded to, children will be handicapped at school; for if they are not prepared to demand clarification, they will find themselves falling behind more and more. *Failure* will become frequent and this in turn will cause motivation to decrease and the school to lose its effectiveness.

In a study of certain current problems in Indian education, Ramphal<sup>(115)</sup> says that the standard English in Indian homes in Durban, is generally lower and provides little or no incentive to children to aspire to heights of linguistic excellence: often, the English used by the elders in the home is crude and elemental. Literal translations of the mother tongue into English are common, resulting in distortions of idiom. Even in those Indian homes where the members speak little else but English, the range of vocabulary, idiomatic usage and correct expression are, on an average, at a lower level than in an average English speaking European family.

According to Logue<sup>(116)</sup>, for most of the Indians, English falls somewhere between a first and second language. Even though many Indians use English in the local public examinations with tolerable success, it is in the finer shades of word meaning that they are weak. They

lack that intangible but very real knowledge of the language which comes not from a study of grammar books, but from the daily contact of individuals mixing from birth, in an environment which uses English as its means of communication.

#### 1.5.4 Intelligence

The theory that intelligence is a constant power, unaffected by environmental factors, and predetermined by the genes - a theory which found strong support in Spearman's viewpoint of the "g" factor, is no longer tenable. It is widely recognised to-day that the quality of education received by a child can have a marked effect on his intellectual outlook. In this regard Behr<sup>(117)</sup> warns teachers against the dangerous assumption that a mental age derived from an intelligence test may be regarded as a ceiling above which the pupil cannot be helped to rise.

In the Report of a Mission to Overseas Countries by the Transvaal Education Department (1965) the following table was used to illustrate that intelligence as such has a limited value in regard to progress at university.

TABLE 1.1

COMPARISON OF AVERAGE MATRIC AND AVERAGE ACHIEVEMENT ACCORDING TO IQ OF FAILURES AT UNIVERSITY.

IQ GROUP	100- 109	110- 119	120- 129	130- 139	140- 149	150- 159	TOTAL
Av. University Mark %	37,4	39,1	38,2	34,9	37,8	44,5	37,6
Av. Matric Mark %	48,2	50,7	52,7	55,2			51,8

SOURCE: Transvaal Education Department: Report of a Mission to



The achievement in the matriculation examination becomes higher as the I.Q. of the pupils become higher, but in the university examinations, there is not a similar increase.

The inference here is that it is not so much the intelligence of a student but the way in which he uses his intelligence, such as it is, that is important; and the way he uses it, depends on his personal qualities. Naylor<sup>(118)</sup> says that abilities and achievement are positively related, which is to say that high ability tends to go with high achievement, and low ability with low achievement. However, Naylor using the Products Moment Correlation Co-efficient, argues that the typical value of the correlation between intelligence and attainment is around  $r = +0,50$ . A value of  $r = 1,00$  has never been reported so that even though occasionally the value might be greater than  $+ 0,50$ , it never reaches unity. This implies that some part of the individual differences in attainment can be accounted for by deficiencies in intelligence.

The question is: How much? Taking  $r = + 0,50$ , Naylor, by computation, arrives at the conclusion that even if there were no individual differences in intelligence, the actual variance in school performance would still be 75% of what it is when there are individual differences in intelligence. A significant percentage of the variance in attainment must therefore be accounted for by qualities other than intelligence. This provides the point of departure for seeking correlates between personality and school achievement.

Jensen<sup>(119)</sup> raised a storm of protest when he suggested that genetic rather than environmental factors are largely responsible for the Negro's lower average IQ scores and poorer scholastic performance.

Jensen concedes that environmental factors are also involved in IQ differences. In the process of measuring the relative importance of heredity and environment, Jensen came to the conclusion that in contemporary white America, environmental factors account for no more than 20% of the variation in individual IQ's, with genetic factors accounting for the rest. Jensen's assertion that genetic factors account not only for the great bulk of the IQ differences among individuals *within* a given group, but also for the great bulk of the IQ differences *between* groups, in particular between white and black Americans, drew a sharp rebuke and challenge by Professor Jack Tizard, President of the British Psychological Society, who dismissed Jensen's claims as "operating to the limits of probability", "provocative", "spurious" and "based on false assumption"<sup>(120)</sup>.

In a research by Werner<sup>(121)</sup> and his co-workers who studied ethnic and socio-economic status differences in abilities and achievement in Hawaii, using Anglo-Caucasian, Japanese, Philipinos, Hawaiian and Portuguese children, significant ethnic group differences were found in mean Primary Mental Ability (P.M.A.) IQ and verbal comprehension, reason, space and numerical ability. Ethnic group differences were also apparent in a percentage of school achievement problems, poor grades and emotional problems. However, the researchers conclude that ethnic group differences can be attributed to child-rearing attitudes, language habits, and emphasis on achievement and educational stimulation in the homes of the children. These findings were corroborated in a study by Moshe and Sarah Smilansky in Israel in 1967<sup>(122)</sup>.

To what extent can intelligence be regarded as a good predictor of a child's potentiality? Gulliford<sup>(123)</sup> argues that the performance on an intelligence test may be depressed by poor reading or other factors. Low test scores may be reflecting a pupil's cultural and



linguistic limitations which might be remedied by special teaching.

Schulman<sup>(124)</sup>, Ramphal<sup>(125)</sup> express the view that for those who fail, there may be less emphasis on verbal-type ability and/or less opportunity to develop that, resulting in more even (but inferior) development of both types of abilities. Such an interpretation would again stress cultural factors as determinants of discrepancy patterns before intellectual level of subjects *per se* could be felt to be responsible.

#### 1.6 SUMMARY

In terms of the literature reviewed here, it is clear that *failure* at school cannot be attributed to a single factor. School *failure* is a complex problem to which there is no simple solution. But from the studies, several highly significant inferences can be drawn, namely:

- (i) Although some of the studies reviewed here have shown a tentative relationship between *failure* and low socio-economic factors, by no means are they the only factors in influencing academic achievement. Poor socio-economic background *per se* does not inhibit academic performance, but is influenced by a complex of cultural factors frequently, but not necessarily, associated with poverty and low social status. These include the nature of the language used and the whole range of unconsciously transmitted values and attitudes.
- (ii) Individual differences in school achievement cannot be reduced to individual differences in the intelligence of the pupils. Even if there were individual differences in intelligence, a significant percentage of the variance in scholastic attainment, must be accounted for by factors other than intelligence. This suggests that apart from intelligence, personality factors also



could play an important role in school achievement.

It would be safe to suggest that the background of the Indian community, their particular setting in their wider environment the factors and forces influencing change within the fabric of family and community life, would show up interesting differences and variations. Therefore, many of the issues discussed earlier on in the chapter are pertinent to the problem of *failure* in Indian secondary education, which will be taken up in Chapters 4 and 5.

REFERENCES

1. Province of Natal: Report of the Director of Education for the year 1939.
2. Province of Natal: Report of the Director of Education for the year 1945.
3. Department of Indian Affairs - *Division of Education Report 1965*.
4. Biebuyck, L.T.J. 1945/46: Province of Natal Directors Report 1945/46 - p.26.
5. Times Educational Supplement: December 21, 1962 p.819.
6. Banks, Olive and Finlayson D: *Success and Failure in the Secondary School. An Interdisciplinary Approach to School Advancement*. Methuen & Co. Ltd. London, 1973 p.viii.
7. Ibid., p.4.
8. Wall, W.D., Schonnel F.J. and Olson W.C.: - *Failure in School - An International Study*: Unesco Institute for Education - Hamburg - 1962 p.1.
9. Banks, O, and Finlayson: op.cit., p.12.
10. Gulliford,R.: *Backwardness and Education Failure*, (National Foundation of Education Research, London, 1969) p.10.
11. Ibid., p.11.
12. Schonell,F.J.: "School Failure" *The Slow Learning Child*, November 1956 pp.66-68.
13. Behr, A.L.,: "Meeting the needs of the Underachieving Child in South Africa - An analysis of Current Resources and Needs". (An address delivered at the National Conference on the underachieving child held at the University of Durban-Westville - Sept/Oct. 1974.
14. Fontini, M.D., and Weinstein: *The Disadvantaged-Challenge to Education* - Harper and Row, New York 1968 p. 206.
15. Olive, Bank and Finlayson - op. cit., p.vii.
16. Wall, Schonnel and Olson: op. cit., p.1.
17. Brimer A.: - *Wastage in Education - A World Problem - A Statistical Study of Wastage at School* - Unesco, Paris, 1974 p.24.
18. Langeland A: "Aspects of Failure" - *International Review of Education*, Vol. 111 1957 - p.129.
19. Coleman, J.S.: *Equality of Education opportunity*. U.S. Government Printing Office - Washington D.C. p.55.

20. Peters, R.S.(ed.) : *Perspectives on Plowden* - Routledge and Kegan Paul, London, 1969, pp.59-62.
21. Provinsie Oranje Vrystaat, *Verslag van die Provinsiale Onderwyskomsie 1951.*
22. Province of Natal, *Report on the Provincial Education Committee, 1946*
23. T.O.D. Verslag deur die Komitee insake gedifferensieerde middebare Onderwys vir Blankes 1957.
24. Raad vir Geesteswetensloplike Navorsing Pretoria 1970 - verslag Nr. - M.T. 2 - *Die 1965 Talentopnometoets program.*
25. Behr, A.L. op. cit., p.7.
26. Ibid., p.2.
27. South African Indian Teachers Association *The Teachers' Journal*, June 1968 p.2.
28. Ibid., p.2.
29. Ibid., p.2.
30. Ibid., p.4.
31. Pyper: Parliamentary Debates, Dept. of Indian Affairs - File 19/46/4/3
32. Natal Mercury, 26 July 1975 p.10.
33. Ibid., p.10.
34. Naidoo, B.A. : *S.A.I.T.A. Teachers' Journal* Nov. 1969. "Indian Education with Special Reference to Socio-Economic Aspects". p.16.
35. Getzels, J.W. and Thelan, H.A. : A Conceptual Framework for the Study of the Classroom Group as a Social System, *Social Psychology of Teaching* (eds.) Morrison, A and Mc Intere, D. Penguin Books 1972 p.19.
36. Banks, Olive and Finlayson D. : op. cit., p.1.
37. Van Der Walt, N., - Die Vraagstuk van druiwing op skool - 'n geskiedkundige - vergelykende studie, PHD. Thesis University of South Africa. 1962 - p.186.
38. Wall, W.D. , Schonnel, F.J. and Olson, W.C. : op. cit., p.57.
39. Ibid., p.57.



40. Ames, V. : Factors related to high School achievement" *Journal of Educational Psychology* Vol. XXXIV 1943. pp.228-236.
41. Chopra, S.L. : "Parental occupation and academic achievement of high school students in India" *The Journal of Educational Research* Vol. LX 1967. pp.359-62.
42. Miner, Betty : "Sociological background variables affecting school achievement" *The Journal of Educational Research* Vol. 6 No. 8 p.372.
43. Coombs, R.H., & Davies, V.: "Socio-Psychological Adjustment in Collegiate scholastic success" *The Journal of Educational Research* Vol. 61 No. 4 Dec. 1967 pp.186-187.
44. Coleman, J.S. et al : "Equality of Educational opportunity" U.S. Government Printing Office - Washington D.C. p.55.
45. Havinghurst, J. et al.: *Growing up in River City* - Wiley New York 1962 pp.50-53.
46. Deutch, Cited by Rosenthal, et. al. - *Pygmalion in the Classroom* Holt Rinehart & Winston - New York 1968 pp.50-53.
47. Finlayson, D., "Towards a Socio-Psychological view of School Achievement" *The British Journal of Educational Studies* Vol. xxi No. 3 Oct. 1973.
48. Birch, H.G., & Gussow, J.D. *Disadvantaged Children Health, Nutrition and School Failure*. Harcourt Brace, New York 1970 p.xiii.
49. Cullen, Kathleen: *School and Family - Social Factors in Educational Attainment* - Gill & Mac Millan, Dublin, 1969 p.204.
50. Chopra, S.L. : "Cultural Deprivation and Academic Achievement" *The Journal of Educational Research* - Vol. 62 Aug. 1962 pp.435-37.
51. Curry R.L.: "The effect of Socio-Economic status on the scholastic achievement of sixth grade children". *The British Journal of Educational Psychology* Vol. XXXII 1962 pp.46-49
52. Hess, R.D. & Shipman, V.C. : "Early Experience and the Socialisation of Cognitive modes in Children" *Child Development* Vol. 36 - 1965 pp.869-886.
53. Miner, Betty: Op. cit p.372.
54. Chowdhury P. "Report of an investigation into the problem of wastage and stagnation in primary schools in the district of 24 Paraganas - Calcutta". Directorate of Education - Govt. of West Bengal 1965.
55. Pringle, Kellmer, M.L.: *Deprivation and Education* Longmans, London - 1965 pp..295-307.

56. Gulliford, R.: *Backwardness and Educational Failure*  
National Foundation for Educational Research in England  
and Wales - London 1969 p.15.
57. Clausen, J.A. & Williams, J.R.: "Sociological correlates of  
child behaviour". *Sixty - second year-book of the National  
Society for the Study of Education, part I.* Chicago,  
1963 pp.62-107.
58. Cullen, Kathleen: Op. cit., p.204.
59. Coleman, J.S. et al: Op. cit., p.55.
60. Havinghurst, R.J. & Passow, A.H.: "The Nature and needs of  
the disadvantaged" in *Sixty-Sixth year book of the  
National Society for the study of Education part I.*  
Ed. P.A. Witty - University of Chicago Press, 1967 p.15.
61. Bruner, J.S.: *The Relevance of Education* George Allen and  
Unwin, London, 1972. 20
62. Kneller, G.E. : *Foundations of Education* John Wiley & Sons,  
New York 1971, p.55.
63. Ashbell, B. : *The New Improved American* Mc Graw - Hill,  
New York, 1965: p.82.
64. Ibid., p.83.
65. Ibid., p.83.
66. Ibid., p.83.
67. Bruner, J.S.: op. cit., p.133.
68. Birch, H.G. and Gussow, J.D. op. cit., p.XIII.
69. Ibid., p.XIII.
70. Jensen, A.R. : "The Culturally disadvantaged: Psychological  
and Educational aspects" reproduced in *The Teachers' Journal*  
June 1968 - South African Indian Teachers' Association p.16.
71. Bricklin, B. and Bricklin, P.M.: *Bright child - poor grades*  
Delacarte Press, New York 1967 p.IX.
72. Thorndike : Cited by Ashbury: "Selected factor influencing over  
- and under achievement in young school age children" in  
*Review of Education REsearch* Vol. 44 No. 4 Fall, 1974  
pp.409-428.
73. Behr, A.L. : op. cit., p.2.
74. Naylor F.D. : *Personality and Education Achievement*, John wiley  
& Sons; Sydney 1972 p.15.



75. Pringle, Kellmer, M.L. : *Able Misfits - The Educational and Behaviour Difficulties of Intelligent Children* Longmans - London 1970 p.74.
76. Bartlett, Ethell: "The Intelligent school failure" *Times Educational Supplement* Dec. 21 1962 p.819.
77. Ibid., p.819.
78. Van Wyk de Vries : Main Report of the Commission of Inquiry into Universities. RP 25/1974 Government Printer p.242.
79. Naylor, F.D.: op. cit., pp.14-25.
80. Ibid., pp.14-25.
81. Taylor R.G. : "Personality traits and Discrepant achievement: A review" *Journal of Counselling Psychology* 11 1964 pp.76-82.
82. Behr, A.L. : op. cit., p.11.
83. Wilbey, P.: "Education disaster warning from the right" *Natal Mercury* 16 May 1975.
84. Ibid.,
85. Miller, G.W.: *Success, Failure and wastage in Higher Education* The University of London Institute of Education George-Harrap London 1070 p. 37.
86. Beez, W.V. : "Influence of biased Psychological reports on teacher behaviour and pupil performance" *Social Psychology of teaching* Ed. Morrison and McIntyre Penguin 1972 p.324.
87. Ibid., pp.326-329.
88. Rosenthal and Jacobson Cited by Beez Ibid., p.330.
89. Holt, John : *How Children Fail* Pitman Publishing Corp. London 1965 p. 157.
90. Miller, G.W. : op. cit., p.37.
91. Nel, B.F. : "A Phenomenological approach to the problems of modern youth". *Education and our expanding Horizons* U.N. 1961 p.186.
92. Kneller, G.F. : *Existentialism in Education* John Wiley & Sons, New York 1958.
93. Burt, C. : *The Causes and Treatment of Backwardness*. University of London Press 1953 pp.40-41.
94. Wall, Schonnel and Olson : Op. cit., pp.60-65.
95. Cullen, Kathleen : *School and Family - Social factors in Educational Attainment*. Gill & Mac Millan 1969 Dublin p.204.



96. Golden, M. and Birns, B.: "Social Class and Cognitive Development in Infancy" Merryle Palmer *Quarterly of Behaviour and Development* (Detroit) Vol. 14 No. 2 1968 pp.139-149.
97. Jensen, A.R.: "Intelligence Learning Ability and Socio-Economic Status" in *Journal of Special Education* (Philadelphio) Vol. 3, No 1 1969 pp.23-35.
98. Burt, C. : ibid
99. Sinha, D. : "A Psychological Analysis of some factors Associated with success and failure" in University Education *Indian Educational Review* (1) 1966
100. Summerskill, J. : Dropouts from College. *The American College* Ed. N. Sanford Wiley, New York 1962 p.47
101. Douglas, J.W.B. : *The Home and the School* Mac Gibbon and Kee London, 1964.
102. Birch A.G. and Gussow : *Disadvantaged Children - Health, Nutrition and School Failure*. Harcourt Brace, New York 1970 p.3.
103. Behr, A.L. : Op. cit ., p.6.
104. Ainsworth, Marjorie, et al.: "The effects of Environmental Factors on Secondary Educational Attainment in Manchester: A plowden follow-up" *Schools Council Research Studies* Mac Millan Education Ltd., London 1974 pp.3-11.
105. Ainsworth, Marjorie and et al.: Op. cit .,
106. Chowdhury. P. : "Report of an Investigation into thr problem of Wastage and Stagnation in Primary Schools" Directorate of Education, Govt. of West Bengal 1965 p.9.
107. Miller, G.W. : op. cit., p.37.
108. Bruner, J.S. : Op. cit., p.11
109. Ibid., p.20.
110. Young, B.B.W. : "Headstart and other Pre-school Enrichment Programmes" in *The Slow Learner*, Peter Owen London 1970. p.270.
111. Behr, A.L. : *A Text Book of Educational Method - A Guide for Teachers in service and Students in Training* J.L. van Schaik Ltd. Pretoria 1971 p.2.
112. Bernstein, B.: "Some Psychological Determinants of Perception - an Enquiry into Sub-cultural Differences *British Journal of Sociology* No. 9 1958 pp.159-174.
113. Deutsch, M. et al : "Some psychological Aspects of Learning in the Disadvantaged Child" (Studies of the Social Environment and the Learning Process) *Basic Books* Inc. New York 1967 -pp.39-57
114. Deutsch, M. et al. : op. cit., p,54.

115. Ramphal, C. : "A study of Three Current Problems of Indian Education" an unpublished Doctorate thesis U.N. 1961 pp.266-7.
116. Logue, G.D. : "An Investigation into the Suitability of the South African Group Test for Indian Children in Durban, (Unpublished M.Ed. Thesis U.N. 1954 p.77.
117. Behr, A.L. : "Some Present Day Innovations in Education and their Implications" - and address delivered to the Chatsworth branch of SAITA 28 May 1968 *The Teachers' Journal*, July 1968 p.36.
118. Naylor, F.D. : op. cit., p.15.
119. Jensen, A.R. : Cited by Silberman: *Crisis in the Classroom*: Vintage Books, New York 1970 pp.75-76.
120. Tizard, J. : "Intelligence and Race Theory" *Daily News*, 28-4-75.
121. Werner, E.E. et al. : "Ethnic and Socio-Economic Status Differences in Abilities in Achievement in Hawaii : *Journal of Social psychology* Vol. 75 1968 pp.43-59.
122. Smilansky, Moshe and Sarah: "Intellectual Advancement of Culturally Disadvantaged Children" in *International Review of Education* Vol. XIII 1967 No. 4 pp.410-445.
123. Gulliford, R. : op. cit., p.11.
124. Schulman, Patricia : "An Investigation into thr Performance of a group of Durban Indian School Children on the Weschler Intelligence Scale for Children". Unpublished M.A. Thesis (1970) University of Natal P.M.B.
125. Ramphal, C. : Op. cit., pp.266-7



## CHAPTER TWO

### 2. A BRIEF HISTORY OF INDIAN SECONDARY EDUCATION IN NATAL WITH SPECIAL REFERENCE TO EXAMINATIONS, PROMOTION AND RETARDATION PROCEDURES:

#### 2.1. INTRODUCTION

The aim of this chapter is two-fold: firstly to provide in a concise form the socio-economic background of the Indian community in Natal; and secondly, to briefly trace the history of Indian secondary education in Natal - with special reference to examinations, and promotion and retardation procedures.

Any attempt to provide the socio-economic background of the Indian community in Natal, and its relevance to the education of the Indian child, does not necessarily imply that socio-economic factors affect the Indian child in any manner different to the children of other racial groups; but the point may be developed to show that there are subtle and discernible differences associated with background, social evolution, status, economic and cultural factors, either dominating or characterising the Indian community as such in South Africa's multi-racial, but western oriented society.<sup>(1)</sup>

#### 2.2 SOCIO-ECONOMIC AND EDUCATIONAL BACKGROUND OF THE INDIAN COMMUNITY IN NATAL

##### 2.2.1 Structure and Distribution

According to the 1970 census there were 620 436 Asians (mostly Indians) in the Republic of South Africa. Of these 21 617 were in the Cape Province, 80 563 in the Transvaal and 514 810 in Natal.

In 1970 86% of the total Indian population of the Republic lived in the Urban areas. Of the total Indian population, 83% lived in Natal of which 72% lived in Durban - Pinetown - Inanda area.<sup>(2)</sup> In Natal, 68% of the Indian population were Hindus, 20% Moslems and the rest were mainly Christians. Of the Hindus, 90% are made up of the Tamil, Hindi and Telegu speaking groups. All the Urdu-speaking, and 75% of the Gujerati-speaking group are of the Islamic faith.

In a recent study, Booyens<sup>(3)</sup> and his co-workers found that only 26% of the Indian population, against 42% for the Whites, were economically active. The reason for this relatively low percentage of breadwinners, and therefore a relatively higher percentage of mouths to feed per breadwinner, lies in the youthful composition of the Indian population. In 1960, 45% of the total Indian population was younger than 15 years as against 27% for the White population.

### 2.2.2 Economic Aspects

If one views the Indian Community in terms of economic aspects, one will find that there are many geographical variations and group and inter-group differences. There are extremes ranging from those who may be classified as extremely wealthy down to the poverty-stricken and economically depressed groups. If a pyramid were to be constructed from the various sources depicting the economic status of the entire Indian people of the Republic, such a pyramid would have a base that is disproportionately broad in relation to its middle and upper regions.<sup>(4)</sup> Poor economic status is one feature characterising the major proportion of the Indian population, and consequently, the Indian child in his home and educational setting.



In a survey conducted by the University of Natal in 1967, it was found that 66,1% of the Indian families in Durban had incomes of less than R79 per month.<sup>(5)</sup> In another survey conducted by the University of Natal in 1969, it was found that approximately 50 - 60% of the householders in their sample had incomes below the cost of living minimum, and approximately 30 - 40% of the householders had incomes above the minimum.<sup>(6)</sup>

The family income of the Indian community is set out in Table 2.1. In 1970 approximately 34% of the family income of the Indian community in Natal was below R600 per annum. According to the Department of Inland Revenue<sup>(7)</sup> 53% of the total number of married persons and 87,3% of the total number of unmarried persons in 1974 fell in the under R200 per annum income group. In this income group, there were 30 657 married persons with a total of 51 730 children as dependants in the Republic.

### 2.2.3 Sociological Aspects

The Indian is, in many ways a person of marginal culture. He is of the East and yet not of it. He is in the West and yet not wholly within. In recent times the Indian people have moved more rapidly towards the acceptance and adoption of western concepts and modes of living than formerly. Urbanisation has had a marked impact on the way of life of the Indian people, influencing and permeating all areas of their thought and practice, but they are not as yet, fully absorbed into the mainstream of the dominant western culture. They are more within it now than ever before, but still outside on the marginal fringe.<sup>(8)</sup>

TABLE 2.1  
FAMILY INCOMES OF INDIANS IN NATAL  
1960 and 1970

		Family Income (Rand) Per Annum											
		Total families	0	-300	300-599	600-799	800-999	1 000-1 199	1 200-1 599	1 600-1 999	2 000-2 499	2 500+	?
Total	1970	99 035	3 798	9 239	21 333	14 323	11 169	8 503	12 271	6 178	4 885	6 510	826
	1960	67 989	8 020	20 362	19 765	7 525	3 744		6 071		1 530		972
Urban	1970	85 327	3 098	6 499	17 045	12 502	10 022	7 788	11 361	5 760	4 501	6 070	681
	1960	55 060	6 948	13 535	16 707	6 756	3 461		5 581		1 371		701
Rural	1970	13 708	700	2 740	4 288	1 821	1 147	715	910	418	384	440	145
	1960	12 929	1 072	6 827	3 058	769	283		490		159		271

(Source : Department of Statistics Population census, Stats., May 1976, p.71.)



#### 2.2.4 Cultural Aspects

The Indians came to South Africa with a background of a rich culture. Ethnically or by race, despite the heterogeneity by areas of origin, religion, language, etc, the Indian people have maintained their identity but in cultural or group affiliations, in patterns of family life, in kinship and in-group associations important changes have taken place.<sup>(9)</sup>

Some of these changes, especially in group affiliations, and in patterns of joint family system, may have been caused by re-settlement of the Indians in terms of the group areas policy of the country. It may be that the relatively small family-sized houses built by the authorities in such areas as Chatsworth, Merebank, Phoenix and in Pietermaritzburg have played a part in bringing about changes in the traditional joint-family system of the Indian community.

#### 2.2.5 Educational Aspects

The educational level of a community gives a clear indication of the socio-economic status of the community.<sup>(10)</sup> In an investigation carried out by the Human Sciences Research Council in 1973, into aspects of socio-economic position of the Indian community in the Transvaal, it was found, that 21,7% of the population never attended school, 2,7% did not pass the grades, 53,8% did not pass Standard VI, 24,8% passed Standard VI, 15% passed Standard VII to IX and 3,7% passed Standard X. It was also found that 34% of the women had no schooling at all.<sup>(11)</sup>

In another study carried out by the Human Sciences Research Council in 1975, on the socio-economic aspects of the Indian community in Natal, it was found that the educational level of adult Indians was as follows:

TABLE 2.2

THE EDUCATIONAL LEVEL OF ADULT INDIAN MALES IN NATAL

Educational Level	Percent	Cumulative Percent
Std. 10 +	3,5	3,5
Std. 10	3,0	6,5
Std. 9	2,3	8,8
Std. 8	8,4	17,2
Std. 7	4,2	21,4
Std. 6	28,9	50,3
Std. 5	11,4	61,7
Std. 4	10,0	71,7
Std. 3	6,1	77,8
Std. 2	4,7	82,5
Std. 1 - Grades	3,3	85,8
None	14,2	100,00
Total	100,00	-

N = 6 300

Source: Human Science Research Council: Sosio-ekonomie opname van Indiërs in Natal-Deel 4: Opvoedkundige peil en skoolbywoning. Pretoria, 1975, p.5.

From the above table it will be seen that approximately 50% of the adult sample had an educational level of Standard VI and above.

In the following table the educational level of Indian men and women according to age is presented.

TABLE 2.3  
EDUCATIONAL LEVEL OF INDIAN MEN AND WOMEN ACCORDING  
TO AGE

Age Years	Sub. Std - Std. III		Std. IV-VII		Std. VIII+	
	Men%	Women%	Men%	Women%	Men%	Women%
15 - 29	1,1	5,3	31,17	50,6	67,2	44,1
30 - 44	8,8	17,1	45,3	70,4	45,9	12,5
45+	21,8	44,2	58,4	47,8	19,8	8,1

Source: Human Sciences Research Council: Aspekte van die socio-  
ekonomie posisie van die Indiërgemeenskap in Transvaal  
Pretoria, 1974 Verslag Nr. S-32, p30.

From the above table it will be seen that the younger generation, namely, the 15 - 29 year group of Indians, has a higher level of education than the older generation. The older the women, the lower is their educational level as compared with men.

In the set up of the Indian community in the early days, a formal western education for the Indian girl was not considered a necessity. However, since the fifties the impact of the western way of life has been felt by the Indian community with greater force. The last two decades have witnessed a dramatic development in the education of the Indian girl. To-day it is accepted that every Indian girl will go to school and remain there, if she satisfies the academic requirements, until she reaches Matriculation level.

Already there is parity in numbers between the sexes at primary schools. In 1974, out of a school-going population of 129 052 from



Class (i) to Standard V, 64 073 or 49,65% were girls. In the same year, of the 50 391 pupils in Standards VI to X 21 602 or 42,87% were girls. At present approximately 40% of the Standard X pupils are girls.

The number of Indian women entering the university is increasing. For example at the University of Durban-Westville, there were 104 women students in 1964. In 1974 the enrolment of women students at this university increased to 701. The number of women graduating also increased from 4 in 1964 to 95 in 1974.<sup>(12)</sup>

#### 2.2.6 Summary

The aim of the preceding section was an attempt to relate socio-economic aspects to the education of the Indian pupils. In what respects does the background of Indian South Africans, their peculiar setting in the wider middle-class western environment, the factors and forces influencing change within the fabric of personal, family and community life, show up interesting differences and variations in their education? It may be reasonable to suggest that the sociological and psychological processes of adoption, assimilation, compensation and the resistance and defence mechanism would indicate different strands from those of other peoples.<sup>(13)</sup>

It is also reasonable to view the large proportion of Indian children, in relation to socio-economic status, environmental factors and the cultural mainstream represented in the norms of the school system, as the disadvantaged group.

Much has been said about the material progress of the Indian commu-

nity in this country. But in social and cultural aspects the Indian community has not fully assimilated itself into the mainstream of the dominant culture which is represented by the schools.

According to a senior social worker,<sup>(14)</sup> with the progressive upward mobility of the Indian people economically, middle class identification is more than simply socio-economic position. The question arises what proportion of the Indian middle-class to-day were at most one to two generations removed from lower-class status and the extent to which they have as yet grown out of the social and psychological characteristics of their former status.

### 2.3 A BRIEF HISTORICAL OVERVIEW OF INDIAN SECONDARY EDUCATION IN NATAL

The beginnings of secondary education for Indians in Natal may be traced to the year 1899, when the Higher Grade Indian School was established in Durban to provide secondary education for Indian pupils up to Standard VII. In 1899 this school offered tuition up to the Junior Certificate and Matriculation level and continued to serve that function until 1918.<sup>(15)</sup> In 1911 the Indian Education Institute was formed through private enterprise. It offered secondary education to some 100 pupils until 1914.<sup>(16)</sup>

In 1918 a fresh start was made and secondary classes were established in Durban at the Carlisle Street Indian School. By 1927 the secondary school population was 67, and this constituted 0,6% of the total school population.<sup>(17)</sup>

Another private secondary institution which served a useful purpose



in its days was the Marine College. This school was opened and run by a Mr. Papert in 1925 and flourished until 1930. (18)

The greatest advance in secondary education was made in 1930 when Sastri College was opened in Durban. It was largely through the efforts of the Rt. Hon. Mr. S.V. Sastri that this magnificent institution which was named after him came into being.

By 1932 the position in regard to secondary education for Indians improved only slightly. Secondary education was provided at two Government institutions, viz. Sastri College and the Mitchell Crescent Government Indian Girls' School which was established in 1932. (19)

In 1933, in addition to the two State schools, secondary education was provided at two State-aided schools, viz. St. Xaviers Oakford at Verulam and the Sydenham Girls' School. In all, 296 pupils were receiving instruction in secondary education at this time. Of this number, 276 were boys and 20 girls.

The secondary enrolment increased at a very slow rate. In 1940 the total enrolment at secondary schools was 554. (20)

There was a marked improvement in the over-all enrolment by 1942. The total secondary school enrolment increased from 554 in 1940 to 643 in 1942. The latter figure represented 2.2% of the school population. (21)

The post-war years, however, witnessed a phenomenal growth in Indian secondary education. In 1947 there were nine schools offering secondary education. Of these only three schools offered courses up to the Matriculation level and the rest provided tuition up to the Junior Certificate level.



Besides accommodation, the main difficulty in regard to secondary education was the small number of Indian graduate teachers. Many of those who held degrees had obtained them as external students of the University of South Africa, or as part-time students of the Natal University College. Here the choice of subjects was limited and the students were obliged to take major and qualifying courses in subjects which were not generally taught in secondary schools. Only those who obtained their degrees at Fort Hare had done post-Matriculation work in Science and Mathematics. (22)

The growth of secondary education was slow but sustained until 1958. In that year there were about 4 000 Indian pupils in secondary schools (4.4% of the total school population of 90 000. The comparative figure for White pupils was 24% in 1958). Thereafter there was a sharp rise in the number of Indian pupils. In 1965 the secondary school pupils constituted 11,5% of the total school population. (23)

Prior to the transfer of Indian Education to the Department of Indian Affairs most of the secondary schools for Indians in Natal came into being as a result of the enterprise of the Indian people themselves who provided the sites and at least half the building costs. (24) Four such high schools, namely Sastri College, Gandhi-Desai High School, Orient High School and Umzinto High School "are magnificent structures symbolising the place education has in the life of the community". (25)

In terms of the Indians Education Act (Act 61 of 1965), the control of education for Indians was transferred to the Department of Indian Affairs. This transfer was with effect from 1 April 1966 in Natal, 1 April 1967 in the Transvaal and 1 January 1971 in the Cape.

Mr. P.R.T. Nel was appointed Chief Education Planner to work out the details for the transfer of Indian education from the provinces to the control of the Department of Indian Affairs. In his report Mr. Nel commented as follows on the state of Indian education: (26)

It is clear that secondary education for Indian pupils has arrived at the crossroads- unless it is to be regarded as the prerogative of the few. With approximately 2 000 additional pupils arriving at the gates of the high schools every year it is vitally necessary that there should be bold and full-scale planning backed up by the necessary physical and financial action regarding the provision of suitable high schools."

With the take-over of Indian education, the Department of Indian Affairs paid special attention to the provision of school accommodation. In 1966 there were 29 State high schools and 2 State-aided Indian high schools in Natal. At the end of 1976 there were 48 State high schools and 4 State-aided high schools in Natal.

### 2.3.1 The Curriculum

The Oxford Pocket Dictionary defines *curriculum* as 'appointed course of study'. For the purpose of this section, *curriculum* is defined as a planned educational programme offered to the learner under the guidance of the school.

Prior to 1960, the curricula in Natal secondary schools were based on traditional considerations, dictated by more or less well-founded notions of what seemed desirable, rather than by the objectively as-



certained needs and capacities of children. Commenting on the narrow and restricted curriculum the Wilks Committee Report in 1946 remarked as follows:

"The predominantly academic bias of the school curriculum has had the unfortunate result that several important basic elements of an integrated curriculum have been neglected."<sup>(27)</sup>

Among others, due attention was not given to the more practical subjects, hence justice was not done to the interests and future needs of large numbers of pupils. This forced the pupils to follow a course of study of an intellectual character quite outside the range of interests of the bulk of the pupils. The academic bias had been all the more cramping in effect in that, the content of the course was largely dictated by the requirements of an examining body which has had the needs of university entrance as its major consideration.<sup>(28)</sup>

As the number and variety of pupils going to secondary schools increased, it was found that the subjects prescribed for Matriculation did not suit all the pupils. These subjects were all that the schools offered at the time and pupils had no option but to take them whether they went to university or not. Consequently there was a high drop-out rate at the secondary school level. For those who were compelled to pursue the Matriculation course, whether they intended to go to university or not, some of the subjects had little significance except as hurdles to be negotiated in order to obtain a certificate.<sup>(29)</sup>

The question of providing some form of education for those who would not proceed to the university, exercised the minds of many educationists in South Africa. Such men as Sir Langham Dale, Dr. Muir and Dr. Andrew



Murray, gave this matter serious attention as far back as the 1890s.

Gradually the movement to broaden the secondary school curriculum gained momentum until 1905, when the council of the University of the Cape of Good Hope appointed a committee to investigate the institution of a school-leaving certificate examination.<sup>(30)</sup>

Thus it came about in 1910, after considerable negotiations between the Education departments and the Council of the University of the Cape of Good Hope, that a new school leaving certificate examination was established. This was the first concrete step taken to provide an examination which would meet the need for differentiation at the secondary school level. In this step we find the germ of a parallelism which in later years took on a variety of forms, such as dividing pupils into an "A" stream and "B" stream or into an "A" level and "O" level in the secondary schools.<sup>(31)</sup>

At the beginning the new school leaving certificate was not popular. It was viewed with suspicion by employers who felt that, if youngsters could not survive the tougher subjects such as mathematics and Latin demanded by the traditional Matriculation, there must be something lacking in their general intelligence. In consequence, by 1912 there were only 122 candidates who took the new school-leaving certificate examination compared with 1 693 who took the Matriculation examination. Of the 51 who passed, the school-leaving certificate examination, 24 were from the Cape, 11 from the Orange Free State, 8 from the Transvaal and none from Natal. The rest were private candidates.<sup>(32)</sup> So even at that stage we notice that Natal was still adhering to the traditional Matriculation examination.

Later a feeling grew among the education departments that the examination papers for these two examinations conducted by the Joint Matriculation board, were set largely by university professors who were out of touch with the school situation. It was felt that they sometimes set papers that were widely off the mark, as regards how the subjects were being taught at schools. Consequently in the early 1920s, the Cape and the Transvaal education departments instituted their own examinations and certificates. These, however, had to receive a subject for subject recognition by the Joint Matriculation Board which also moderated the examination papers.<sup>(33)</sup>

In the beginning the schools were reluctant to enter their pupils for departmentally conducted senior certificate examinations, and continued to patronize the Joint Matriculation Board's examination. For example in the Cape Province, of nearly 2 000 pupils in Standard X, in 1923 and 1924, only 262 and 582 candidates respectively entered for the provincial examinations. In 1932 however, the Cape Education Department made it compulsory for candidates from its public schools to take the departmental examinations.<sup>(34)</sup>

In 1937 the Orange Free State introduced its own departmental examinations. The Natal Education Department, however, continued to patronize the Joint Matriculation Board's examination and it was only in 1953 that it introduced its own departmental senior certificate examination.<sup>(35)</sup>

On the issue of external examination, the Wilks Report of 1946 commented that while the three other provinces had attained a measure of freedom by the institution of their own examinations, planned on a wide basis, in Natal the Matriculation examination of the Joint Matriculation Board "has become the arbiter of the educational fate of all children, who, whatever their bent, have been forced through the academic mill."<sup>(36)</sup> In its report the Wilks Committee recommended



that:

- (i) the Standard VI Examination should be abolished;
- (ii) a Natal Junior Certificate and a Natal Senior Certificate Examination should be introduced at the Standard VIII and the Standard X stage, respectively.

On the issue of school curriculum, the Wilks Committee Report recommended *inter alia* that in order to provide for the needs of all children, four distinct and separate courses be provided. This could be done in separate schools but the Wilks Committee was against this suggestion and stated that the pupils should be kept in one school with multilateral 'sides'. In this way the education of the children could be viewed as a whole and the intellectual snobbery of academic courses be counteracted. (37)

The courses recommended by the Wilks Committee were as follows:

- (a) Practical course useful to the large number who would leave at the completion of the compulsory age minimum. All high schools were to offer this course;
- (b) Commercial courses for girls;
- (c) Pre-vocational course for boys designed for those boys who have technical and professional careers in view;
- (d) The university admission course;

The suggested curricula of the Wilks Committee included a large common core of subjects and had a strong prevocational bias. In this regard Behr and MacMillan<sup>(38)</sup> state that the ideas in general were in line with the best thought of the day on the subject.

Natal was, however, not ready for such a development, the emphasis in the schools being at that time, and later, on academic education



which was strongly entrenched. (39)

The Wilks Committee also recommended Courses A, B and D for Indian and Coloured schools and that changes in the curriculum should take place in Coloured and Indian schools at the same time as in White schools.

The recommendations of the Wilks Committee in respect of curriculum were not put into effect. After a visit by the Director of Education overseas, the Natal Education Department instituted the two stream system of education in White schools in 1962. This system of streaming was not applied to Indian and Coloured schools. In Indian schools, streaming was introduced by the Department of Indian Affairs in 1967.

#### 2.3.1.1 Streaming in Natal White Schools and its Implication for Indian Education.

In 1962 the Natal Education Department introduced the system of streaming in White schools. There were two streams, the Advanced Grade and the Ordinary Grade. The Advanced Grade which absorbed about two-thirds of the secondary pupils, led to the Senior Certificate with or without Matriculation exemption, and the Ordinary Grade operated on a special syllabus and led to the Senior Certificate only. Admission to the two streams took place at the end of the Standard VI year, based on the overall results of examinations controlled by the Natal Education Department. It was subsequently found, however, as a result of an investigation by Professor R.E. Lighton in 1963, that there was not sufficient differentiation allowed within the "A" stream, which was still too heterogenous as regards abilities. It was therefore recommended to split the "A" stream into two and have altogether three streams, A, B, C. This

remained only a recommendation. It was estimated that 63% of pupils would be in the Advanced Grade and 37% in the Ordinary Grade. In the first Junior Certificate examination written in 1963, by the two-stream White pupils, there were 67% in the Advanced Grade and 32% in the Ordinary Grade and the total number of candidates had increased by nearly 25%.<sup>(40)</sup> On the other hand, in the absence of streaming in Indian schools, 100% of the Junior Certificate candidates wrote their examination on the Advanced Grade in that year.

The secondary schools for Indians in Natal offered a very restricted curriculum. In 1963, no fewer than 87% of the candidates for the Junior Certificate examination took precisely the same course viz. English A, Latin, biology, mathematics, arithmetic, geography and history or bookkeeping.

Of those who wrote the Natal Senior Certificate examination, 74% offered the same course, namely English A, Latin, biology, mathematics, geography and history. Very few candidates took physical science or Afrikaans.<sup>(41)</sup>

In the absence of streaming in Indian schools, many pupils who would have been placed in the "O" stream, if streaming were applied, in fact followed the "A" stream course which was probably beyond their capabilities. Apart from this, pupils of varying ability range were placed in the same class. In White schools the pupils were classified and placed in separate "A" stream and "O" stream class units. This facilitated teaching, in that pupils were placed on more or less homogeneous groups, whereas in the Indian schools, teachers had to contend with heterogenous groups. Thus, the able and the weak pupils in these heterogenous groups were handicapped because in such a situation teaching was geared to meet the needs of the



average child in the class.

To facilitate the application of the system of streaming in White schools, the Natal Education Department instituted orientation courses for White teachers on the new approach to teaching the two different streams of pupils since 1964. No such provision was made available to Indian teachers. The White candidates who wrote the Natal Senior Certificate examination at the end of 1965 on either the Advanced or the Ordinary Grades, had the benefit of differentiated education since the time they were in Standard VII in 1963. On the other hand, in the Indian schools the Senior Certificate candidates, who wrote the same examination on the Advanced Grade as their White counterparts, were placed at a considerable disadvantage as they all wrote the examination on the Advanced Grade without any differentiated teaching applied to them. (42)

This is one of the basic reasons for the high *failure* rate among Indians as compared with Whites in Natal. This was evidenced by the fact that since 1964, there was a downward trend in the examination successes in Indian schools.

Apart from the lack of streaming in Indian schools, the narrow and restricted curriculum in the secondary schools together with the lack of suitably qualified teachers also contributed to the high *failure* rate. Commenting on this issue Behr<sup>(43)</sup> stated that the examination successes were on the whole very disconcerting. He said that the two principal factors contributing to the poor examination results were, firstly, a dearth of suitably qualified teachers and secondly, the lack of diversity in the range of courses.

For example, of the 2 680 candidates who wrote the Natal Junior

Certificate examination in 1963, 2 332 or 87% took the same subjects. Only 203 candidates offered Afrikaans and 2 508 offered Latin of which 901 or 36% failed. In the whole examination 925 candidates failed, but 315 of them were given Ordinary Grade passes, leaving 610 outright failures.

An important consequence of the lack of diversity in the courses offered in Indian secondary schools by the Natal Education Department, was that Afrikaans, although one of the official languages of the country, was not made compulsory for the pupils. This has had a serious effect on many pupils who later proceeded to become teachers in that they are now handicapped in view of the fact that Afrikaans is compulsory for all pupils from Class (i) to Standard X.

With the transfer of Indian education to the Department of Indian Affairs in 1966, the Advanced Grade and Ordinary Grade system of streaming was introduced in Indian secondary schools in 1967. This system of streaming continued until the end of 1972. In 1973 the Department of Indian Affairs introduced the new system of differentiated education in all its schools.

#### 2.4. SOME ASPECTS OF EXAMINATIONS IN GENERAL

While it is not the place nor is it the intention of this study to include a detailed discussion of examination and evaluation procedures, yet it will be of value to preface any consideration of *failure* in school by the briefest reference to examinations.

*Failure* is, however, a relative term both in terms of the definition we give it and in terms of some evaluation procedure such as examination or tests. *Success* and *failure* are inevitably arbitrary conceptions.



Most of the characteristics which we wish to assess for our simple or complex evaluation are present in any given school population in such a way, that if we measured them and plotted the resulting marks on a frequency graph, it would form a "curve of error". Most children's marks would bunch around the average, tailing away to fewer and fewer marks well above and well below the mean. There would be no abrupt point which clearly marked off the *failures* from the *successes*; no clearly distinguishable group with special characteristics. Hence a decision, more or less arbitrary, would have to be taken as to a cut-off point, the level below which we consider the individual child to be *failing*.<sup>(44)</sup>

According to the level at which this cut-off point is fixed, the proportions of *failure* will vary in the same group, on the same occasion and in terms of the same measures.

Even where the most accurate means of mental measurement are used, the adoption of a border-line must be a matter for judgement in the light of the educational situation and the needs of both the individual child and of the group of pupils to which he belongs. That is to say, in fact, that *failure* and *success* are relative terms, meaningful only when carefully defined, based upon a clearly expressed educational philosophy and susceptible of some sort of objective, reliable and valid measurement.<sup>(45)</sup>

*Failure* is therefore implicit in the structure of the curricula and programmes of most of the school systems of the world. In all but a few countries, a detailed programme of studies is laid down by a central authority. Such programmes specify, for each age-grade, the material which must be taught and the standard of mastery which must be attained by the end of each year's work. It is assumed



that the work prescribed, given suitable industry by the pupil and sufficient skill on the part of his teacher will be mastered in the school year. The normal pupil, therefore, will progress from year to year and in five calendar years will complete five school years of work. *Failure* will be indicated by the pupil not having mastered the work of one year, repeating it in the following year, so that he will be one year at least behind his chronological contemporaries. (46)

#### 2.4.1 The Assumptions

It is clear that the educational authorities make certain assumptions. The first is that the planners of curricula and syllabuses know the capacities of the average child sufficiently accurately to gauge what, under normal teaching conditions, he is capable of learning. Secondly, it is assumed that unless a pupil has mastered one year's work he cannot successfully undertake that of the year following. Thirdly it seems to be accepted that the repetition of a year's work will lead to a greater mastery of it and improve a weak pupil's chance of further uninterrupted progress. (47)

#### 2.4.2 The Decision

The decision to fail or not to fail is usually taken by the teacher and or by the inspector. This decision is based either upon the results of a series of tests throughout the year or upon some kind of promotion examination.

#### 2.4.3 The Criteria

The bases for promotion or retardation inevitably have a strong element of the subjective, in the choice of questions, in the marking and in the weight given to particular subjects of the curriculum. For example, it is not uncommon, particularly in the first two or three years



of school, for a pupil to fall somewhat behind in either reading or arithmetic. If these alone, or even one of them, are the determining subjects in promotion, a child may be kept down for a transitory and remediable weakness in the one subject only, whilst in fact in all other aspects of the curriculum he has made satisfactory or even outstanding progress. If to this we add the demonstrable tendency inherent in systems like this towards a consistent proportion of failures year in and year out, with peaks perhaps at particular years - end of the year of first entry; the year before transition to secondary schools; the year before entry upon direct preparation for an important external examination - then we are obliged to recognise that a child's educational career depends upon a combination of elements, many of them evidently arbitrary. (48)

#### 2.4.4 Manipulation of Failure rates

According to the UNESCO report (49) on *failure* in school, "the failure and doubling rate, as well as the drop-out or wastage figures, have, however, a large element of artificiality and it is becoming clear that they are manipulable in many ways". The report quotes the findings of Van Vliet who has made a special study of the problem of doubling and wastage in the many developing school systems of the world. An interesting finding was that the school systems tend to adopt a particular promotion rate from year to year in their primary schools: that is to say that over a period there seems to be a habit of failing at the end of each year a given, and more or less constant, proportion of pupils. This figure varies under circumstances. For example, as stated earlier, it tends in some systems to be higher at the end of the first year. Sometimes too, the imminence of an external examination is heralded by a higher *failure* rate in the

preceding year.

Miller<sup>(50)</sup> cites Jenkins who showed evidence of built-in wastage in technical institutions in England, where established percentages are failed in each year and thereby disqualified from proceeding to the following year. In the following table cited by Miller we see how, when six different pass rates are applied to a given 100 candidates in courses of up to seven year's duration, severe reduction in student numbers occurs.

TABLE 2.4

THE EFFECT OF CONSISTENTLY APPLYING SIX DIFFERENT PASS RATES TO 100 CANDIDATES IN COURSES OF UP TO SEVEN YEARS' DURATION

Years Completed	Year	50%	60%	70%	75%	80%	90%	
-	1	100	100	100	100	100	100	
1	2	50	60	70	75	80	90	
2	3	25	36	49	56	64	81	
3	4	13	22	34	42	51	73	gain ord. National Certificate
4	5	6	13	24	32	41	66	gain ord. National Certificate
5	6	3	8	17	24	33	59	gain higher National Certificate
6	7	2	5	12	18	26	53	gain higher National Certificate
7	8	1	3	8	14	21	48	gain graduateship

It would be noticed from the above table that even a pass rate of



90% applied year by year produces a high wastage. At this rate, says Jenkins, of the 100 starters only 73 would gain the Ordinary National Certificate, 59 the Higher National Certificate, and in eight years only 48 would gain graduateship of an institution. On a three year course where 66% are passed in each year only about 30% would finish in the minimum time.

In another study carried out by Van Vliet<sup>(51)</sup> it was found that dropping out of school is directly related to *failure* rates since the pupil with a record of *failure* who comes to an age at which he may legally leave, "is unlikely to persist in the thankless task".

The following table according to Van Vliet, shows the figures for various *failure* rates.

TABLE 2.5

THE NUMBER OF PUPILS PER 1 000 COMPLETING A SIX-YEAR COURSE FOR DIFFERENT FAILURE RATES (PUPILS SPEND 8 YEARS AT SCHOOL BUT LEAVE AFTER FAILING MORE THAN ONCE IN THE SAME GRADE OR MORE THAN THREE TIMES IN ALL)							
Percentage Promotion Rate	95	90	85	80	75	70	65
Percentage completing 6 year course	98,6	94,4	87,6	78,7	68,3	57,2	46,1
Percentage Drop-outs	1,4	5,6	12,4	21,3	31,7	42,8	53,9

From the above table it will be noticed that "on a promotion rate

of 90% we might expect only 50 - 60% of children to go through their primary six-year course without failure". The last line in the table indicates the percentage of all pupils who, having attained the age of the compulsory schooling, have left before their final year. Wall and his co-workers conclude "Equally it will be noted that the proportions of 'failure' can be manipulated by raising or lowering the promotion rate. Thus, much of this failure may be termed "administrative" - i.e. imposed on the schools and their pupils by the promotion system itself".<sup>(52)</sup>

In a paper delivered at an orientation course for Indian school administrators, Van der Walt<sup>(53)</sup> compared Standard IX and Standard X examination results in five schools with the best Standard X results and five schools with the worst Standard X results. The Comparison is as follows

TABLE 2.6

A COMPARISON OF SCHOOLS WITH BEST STD. IX RESULTS AND SCHOOLS WITH WORST STD. X RESULTS

	Best Std. X Results		Worst Std. X Results	
	Std. IX Failure	Std. X Failure	Std. IX Failure	Std. X Failure
Sch. A	17%	19%	17%	77%
" B	14%	22%	6%	76%
" C	17%	28%	16%	73%
" D	12%	29%	9%	72%
" E	10%	32%	7%	68%

NB: Std IX Examination is an internal examination



From the above table it is apparent that the sifting procedure was not being applied consistently. This bears out clearly what was said earlier about manipulation rates.

#### 2.4.5 The Value of Examination

Practically every country has a system of examination which plays an enormous role in the operation of its national system of education. Today examinations are used extensively both for the purpose of measuring what has been learned and for selecting from a large number of candidates a small number of the "best".

According to the *World Year Book of Education - Examinations* (1969) the main functions of examinations are:

- (a) They are used to assess the extent to which an individual has benefited from the education he has received;
- (b) The second function is selection. This process implies that the examinee or testee is being selected for something - either for further education or for some task role of society. It implies that not all young people are expected to reach the same levels of achievement and their social roles are differentiated and specialised;
- (c) Examinations are incentives which may persuade indolent youth to strenuous effort;
- (d) They are also used to predict future competence.

Evaluation is an important part of the teaching-learning process. Tests, examinations, projects, etc. are useful to students, teachers and administrators alike. They provide teachers, for example, with a means of determining the degree to which they are achieving their

objectives. A well-constructed examination enables the teacher to judge the effectiveness of his teaching, since it reveals just what it is that students have learned, and what they have not learned or have misunderstood. A good examination may also reveal weakness in the curriculum and suggest ways by which it, too, can be improved. (54)

In recent years the notions of assessment and evaluation have undergone much refinement. In a lucid article written by Professor J. Niven (55) the finer difference between assessment, measurement and evaluation is well defined. Although the article deals with assessment and evaluation in the primary schools, there are certain aspects of his views which are worth consideration in relation to the principles of the system of differentiated education. The article quotes Dobie as saying that if, in a system of differentiated education, the aim is to assist as far as possible in the individual development of each pupil, testing needs to be a means rather than an end.

Children "distribute themselves from poor to good in each of the many endeavours in which they engage. To average these attainments is unrealistic and to determine arbitrary cutting points for passing or failing demands a refinement in judgement that defies human capacities". (56)

#### 2.5 SOME ASPECTS OF INDIAN SECONDARY EDUCATION UNDER THE NATAL EDUCATION DEPARTMENT DURING THE PERIOD 1953-1965

The period between 1953 and 1965 was chosen for two important reasons: First the year 1953 marked an important milestone in the history of external examination in Natal. It was in that year that the Natal Education Department instituted its own Senior Certificate examination. Prior to this, candidates from Natal entered for the examination of the Joint Matriculation Board.



Secondly, the year 1965 marked the end of an era in Indian education in Natal. It was the last year in which the Natal Education Department was allowed to control Indian education. On 1 April 1966, almost after a century of provincial control, Indian education came under the control of the central government and under the direct control of the Division of Education, Department of Indian Affairs.

In this section attention will be paid to:

- (i) the internal and external examinations and the promotion and retardation procedures in these examinations;
- (ii) the introduction of streaming in White schools and its influence on Indian secondary education in respect of promotion and retardation procedures.

#### 2,5.1 Examinations

Under the Natal Education Department there were two types of formal examinations; namely, the internal school-based examination and the external examination. The internal examinations were conducted by the school principal and his staff. The Natal Education Department laid down the rules of procedure for the internal examinations. All schools were issued with common core curricula and syllabi. Internal examinations were based on these common syllabi.

In the secondary schools, Standards VII and IX were the internal examinations.

The external examinations were conducted by the Natal Education Department. The rules governing the various external examination were set out in the respective examinations handbooks which were sent to all schools. The examinations handbooks also provided the syllabi and the prescribed books in the various subjects.

### 2.5.2 Internal Examination Procedures

In terms of the *Directions for the Conduct and Control of Government Schools and Government-Aided Indian Schools* of the Natal Education Department (issued in terms of Section 5(2) of the Natal Education Ordinance No. 23 of 1942, as amended) the following procedures in respect of internal examination were in force up to the time of transfer of Indian education to the Department of Indian Affairs in 1966: (57)

- (i) Principals and Class teachers were responsible for all normal promotions in their schools, except in those classes in which pupils entered for public examinations.
- (ii) Principals were required to submit to the District Inspectors a summary of the promotions and retardations.
- (iii) Recommendations for promotion on trial were not permitted.
- (iv) Recommendations for double promotion were only considered in exceptional cases, such as over-age pupils who were physically and mentally able to cope with the higher work. Other exceptionally intelligent children were expected to be provided for by means of an enriched programme.
- (v) Borderline failures and special cases were reviewed by the principal and recommendations submitted to the District Inspector in the summary of promotions and retardations. When moderating the question papers principals had to ensure that the standard of the papers and the selected pass mark resulted in the promotion of those fit to proceed to the next standard, and the retardation of those who would not be able to cope with the work of the higher standard.
- (vi) No child was to remain in the infant classes for more than four years.



From standard I to V no pupil was allowed to remain in any class for more than two years. Such pupils were required to be referred to the District Inspector.

- (vii) In the case of transfers, it was expected that schools would honour the promotions and retardations of other schools. Should a principal desire to question the promotion or retardation of a pupil transferred from another school he was required to refer the matter to his District Inspector.

#### 2.5.2.1 Examination and Promotions

- (i) No formal examinations were held for below Standard III. Promotions in the lower classes were based on assessment of the years' work. All recommendations for promotion above Standard II were based on internal examination results. At the discretion of the principal, one yearly or two half-yearly examinations could be held. While it was desired to have regular testing, the marks from tests were normally not used for promotion purposes.
- (ii) Where schools held one examination at the end of the year, the full promotion marks in each subject were assigned to the examination. The papers covered the work of the whole year.
- (iii) If two examinations were decided on, the first was held near the end of the first-half year, and the second towards the end of the year. The examination at the end of the first half-year was set on work covered from the beginning of the year. The final examinations were based on the work of the whole year. Not more than one-third of the promotion marks was assigned to the examination at the end of the first half-year.

### 2.5.2.2 Pupils Absent from Examination

If only one examination was held and a pupil was absent from examination, a set of marks based on internal tests (or the teacher's estimated marks) was used. If two examinations were held and the pupil was absent from the first, the promotion marks were based on the final examination alone. If such a pupil was absent from the final examination, a set of marks based on internal tests (or the teacher's estimated marks) were combined with the marks of the first examination to give the promotion marks.

### 2.5.2.3 Nature of Examination

- (i) The questions had to cover the work done in the period under review.
- (ii) Emphasis had to be given to written language and problems in arithmetic in the upper classes.
- (iii) Principals were advised to bear in mind that the pupils would proceed to secondary schools. Hence the upper primary classes were to prepare the pupils for this change. Pupils from Standard IV upwards had to accustom themselves to marshalling facts and to express themselves clearly in each of the subjects. Therefore, the question papers in such subjects as history and geography, apart from questions requiring one or two word answers, also had to include questions requiring answers in paragraph form. Marks for the latter type of questions were allocated as follows:

Standard IV	15½% to 20%
Standard V	25% to 30%
Standard VI	35% to 45%



- (iv) Standard VI was essentially regarded as a preparatory and exploratory year for secondary work. The whole course was to be planned with that in view and the examination papers were expected to test the pupils' abilities in that respect.

#### 2.5.2.4 Conduct of Examination

- (i) All papers set for the examinations had to be moderated. Moderation of papers was done by the principal or by the principal in conjunction with suitable deputies appointed by him amongst the staff.

Moderators had to scrutinise the questions and schemes of marking so as to satisfy themselves that the questions were well distributed within the syllabus and reasonable in all respects.

After the marking had been done, moderators had to check at least 10% of the answer papers to ensure that marking had been thorough and equitable.

If, in the opinion of the principal, the marking had been either too lenient or too severe, adjustments by lowering or raising the marks were recommended.

- (ii) Examination marks had to be analysed so that class report on the results had to be made by the examiner and made available for the information of the teacher so that remedial treatment could be applied promptly. In addition an analysis had to be made to show the median mark.

2.5.2.5 Promotion Requirements: Internal Examination - Standards VII and IX

(i) Prior to Streaming

When Indian secondary education was under the control of the Natal Education Department, Standards VII and IX were internal school examinations. The minimum pass requirements were classified into two sections, viz. one for those who attained a certain required minimum in the examination and who were allowed to continue their schooling, and the other for those who attained a prescribed minimum in the examination and who wished to leave school.

The promotion requirements in the internal examination for standards VII and IX are set out in Table 2.7.

TABLE 2.7

PROMOTION REQUIREMENTS IN THE INTERNAL EXAMINATION FOR STANDARD VII AND IX

STANDARD	PASS MARK	
	Promotion	School leaving
VII	Main language 33½% 4 other languages 33½% Aggregate of 7 subjects 40%	Main language 30% 3 other subjects 30% each Aggregate of 7 subjects 35% each
IX	Main language 33½% 4 other subjects 33½% Aggregate of 6 subjects 40%	Main language 30% 4 other subjects 30% each Aggregate of 6 subjects 35%



The above promotion requirements were in force until 1962 when the Natal Education Department introduced a system of streaming in the schools for the Whites.

(ii) After streaming

In Table 2.8 the promotion requirements in the internal standards VII and IX under the system of streaming are set out. It must be noted that after 1963, two entirely different promotion requirements - one for the Whites and another for the Indian pupils - were prescribed. Although in the past, Indian pupils in the secondary schools were severely restricted in the choice of subjects, the educational programme was the same for both the White and Indian pupils. When streaming was introduced in the White schools and not in Indian schools, the recommendation of the Wilks Committee that the educational programme of Indians should not differ fundamentally from those of Whites, was ignored.

The promotion requirements as set out in Table 2.8 are in respect of both the Advanced Grade and the Ordinary Grade in White schools. There was no provision for a school leaving certificate in standard VII and IX for the White pupils. As far as the Indian schools were concerned promotion in the "one track" course meant that a pupil in Standard VII and IX either passed or obtained a school leaving certificate or he failed. For the White pupil there were several possibilities in the system of streaming, viz.

- (i) At the end of standard VI a pupil passed either into the Advanced Grade or Ordinary Grade depending on his performance in the standard VI examination;
- (ii) If a pupil, having obtained an Ordinary Grade pass, wished to follow the Advanced Grade course, he could do so by repeating standard VI with a view to obtaining an Advanced Grade pass;
- (iii) For the subnormal pupil who could not benefit in either the Advanced Grade or the Ordinary Grade, a school leaving course called "Standard VI School Leaving Certificate - Special Classes" was offered;

Because the pupils were placed in their respective streams according to their abilities, pupils were encouraged to stay on longer at school. It was estimated that immediately after streaming the total number of candidates in the Junior Certificate examination had increased by nearly 25%. (58)

TABLE 2.8  
PROMOTION REQUIREMENTS UNDER THE SYSTEM OF STREAMING IN WHITE SCHOOLS : COMPARATIVE REQUIREMENTS FOR INDIAN PUPILS

Pass Mark

Std	Promotion		Leaving Certificates	
	<u>All Schools</u>		<u>Indian Schools</u>	
VII	Main Language	33½	Main Language	30%
	Four other subjects	33½ each	Four other subjects	30% each
	Aggregate of 7 subjects	40%	Aggregate of 7 subjects	35%
	<u>All Schools</u>		<u>Indian Schools</u>	
IX	Main Language	33½%	Main Language	33½%
	Four other subjects	33½% each	Four other subjects	30% each
	Aggr. of 6 subjects	40%	Aggr. of 6 subjects	35%



### 2.5.2.6 External Examination Procedures Prior to Streaming

In Natal there were three external examinations, viz. the Natal Standard VI Examination, the Natal Junior Certificate Examination and the Natal Senior Certificate Examination.

Standard VI examination for many decades was the terminal point of the primary school. It was abolished as an external examination for White schools in 1948 on the recommendation of the Wilks Committee.<sup>(59)</sup> Recommending the retention of the Natal Standard VI Examination for Coloured and Indian pupils the Wilks Committee remarked. "Standard VI marks the end of primary education for Coloured and Indian children, for most of them the stage at which they will leave school, but for a very fair number the point of transition to the High School. For that reason and because in recent years a rapidly increasing number of non-European pupils has been entering for the Natal Standard VI Examination, it appears necessary for the time being to retain the examination, which has a similar function still to serve for Coloured and Indian children to that which it served in the European schools for the past quarter of a century."<sup>(60)</sup>

The Natal Junior Certificate Examination was instituted in 1951 and was retained as an external examination for the White pupils until 1966. This examination was, however, retained for the Indian pupils. Natal established its own Senior Certificate examination in 1953.

#### 2.5.6.1 Standard VI Examination for Indian Pupils : 1953 - 1965

In the Natal Standard VI Examination there were two categories of pass requirements, viz.: the Continuation Certificate pass requirement which enabled a pupil to continue with his schooling and the School Leaving Certificate which was meant for the school leaver.

The requirements for a pass were:

(a) to gain a Continuation Certificate a candidate had to:

- (i) pass in English A or Afrikaans A
- (ii) pass in at least four other subjects; selected from arithmetic, second language/health education, history, geography and general science;
- (iii) obtain a minimum aggregate of 360 marks out of a possible 950 marks.

The pass marks were 40% in Main Language, 33 $\frac{1}{3}$ % in Second Language/health education and 35% in the other subjects.

(b) to obtain a School Leaving Certificate a candidate had to:

- (i) pass in English A or Afrikaans A;
- (ii) pass in at least three other subjects;
- (iii) obtain a minimum aggregate of 270 marks.

Marks below 20% of the maximum in any subject were excluded from the aggregate.

It will be noticed that health education was an alternative subject to the Second Language. In Natal, Afrikaans was for the majority of White pupils, the Second Language. In Indian schools very few pupils were given the opportunity to take Afrikaans as the Second Language. Hence the majority of the Indian pupils were forced to take health education instead.

#### 2.5.2.6.2 The Natal Junior Certificate Examination

The promotion requirements for the Natal Junior Certificate Examination are set out in Table 2.9.



TABLE 2.9

PROMOTION REQUIREMENTS IN THE NATAL JUNIOR CERTIFICATE EXAMINATION

Pass Marks

Promotion		School Leaving	
Main Language	33½%	Main Language	30%
Four other subjects	33½% each	Four other subjects	30% each
Aggregate of 7 subjects	40%	Aggregate of 7 subjects	35%

The examination subjects for the Natal Junior Certificate Examination were : English, Afrikaans, Latin, history, geography, arithmetic, mathematics, housecraft, biology, physical science and bookkeeping.

Pupils had to offer seven subjects in all. In 1962 only 78 Indian pupils out of 2 242 candidates took Afrikaans for the Junior Certificate Examination, while 2 192 candidates took Latin. In Table 2.10 the position of Afrikaans in relation to Latin in Indian schools is shown.

TABLE 2.10

NUMBER OF CANDIDATES WHO TOOK EITHER AFRIKAANS OR LATIN IN JUNIOR CERTIFICATE EXAMINATION BETWEEN 1962 AND 1965

Year	Afrikaans		Latin	
	No. of Candidates	%	No. of Candidates	%
1962	78	3,4	2 192	98,8
1963	203	7,5	2 508	93,6
1964	311	10,5	2 827	95,9
1965	345	8,9	3 547	92,5

(Source : Department of Indian Affairs, File No. 10/16/1/10)

Although the number of Indian candidates taking Afrikaans increased during 1962 to 1965, Latin was still taken by an average of 95,2% of the candidates in the Natal Junior Certificate examination during the same period. Although Latin was, for many centuries regarded as a discipline by traditional beliefs as necessary for the training of the mind, yet for practical purposes in the South African context it is worth considering whether 95,2% of the Indian candidates in the Natal Junior Certificate examination preferred disciplining their minds to the practical value of using Afrikaans in their day-to-day lives.

#### 2.5.2.6.3 The Senior Certificate (School Leaving) and the Matriculation Exemption Certificate Examinations

##### Historical perspective

Since the Matriculation examination played, and still continues to play, a vital role not only in the educational sphere but also in the economic and social spheres of our lives, it will be useful to preface this section with a very brief reference to the historical development of the Matriculation examination and trace its evolution to the present time.

The first Matriculation examination was conducted in 1874. During the first fifty years the University of the Cape of Good Hope was the sole examining body. In 1918 the Joint Matriculation Board, a newly formed body, took over the control of the Matriculation examination from the University of the Cape of Good Hope. In its first examination the Joint Matriculation Board required a pass in each of six subjects made up as follows: (1) three compulsory subjects consisting of (a) an official language on the A grade, (b) mathematics,



(2) one science; (3) two further subjects from a list of eleven subjects.<sup>(61)</sup> The minima required were: 30% (increased to 33½% in 1931) in each subject and 40% in the aggregate. Soon other changes were effected. Among these were, French and German were allowed as alternatives to Latin. Candidates passing in five subjects and obtaining the required aggregate were allowed to take supplementary examination in the subject failed.<sup>(62)</sup>

The Matriculation examination, is in essence, a university entrance examination. In practice it also served as a school leaving examination for over 70% of the candidates who took the examination.

Though these candidates did not wish to enter a university, their needs were often sacrificed in the interests of the 30% who went to the university. For over a hundred years it has been the sole measuring device for selecting students for university education.<sup>(63)</sup>

During the 50 years when there was only one examination body (first the University of the Cape of Good Hope and then the Joint Matriculation Board) certain changes to the requirements of the examination were made. According to Malherbe<sup>(64)</sup> these changes have been possible causes of fluctuations in the percentage of passes. The first syllabus of the Matriculation examination taken in 1874 consisted of: a component knowledge of English, Latin, arithmetic, algebra and geometry. These constituted the central core of compulsory subjects required from everybody who wanted to enter the public service. There were two optional subjects to be chosen from history, Greek and Dutch or a modern language. The pass mark for an individual subject was 20% in the literary subjects and 25% in mathematics.

The aggregate to be attained was at least 33 $\frac{1}{3}$ % of the total marks. After 1902, history was awarded 250 marks instead of 200 marks, and the number of marks for mathematics was decreased from 800 to 600 marks. (65)

In 1923 a supplementary examination was introduced offering a second chance to candidates who, in the previous November-December examination had failed in one subject only and gained an aggregate mark required for a pass.

Throughout its early history, the Matriculation examination was fraught with conflict between the interests of the schools that had to cater for the many, and the interests of the universities that catered for the few. In the 1890s there appeared a struggle on two fronts- a struggle which dogged the South African educational scene for a quarter of a century. The first was between the universities and the education departments, and the second was between the interests of the intellectual elite, who had to be trained for the professions and leadership, and the interests of the rest whose formal education ended with their school days. (66)

Even as late as 1974, the De Vries Commission made the following criticism of the Matriculation examination. (67)

"About 47% of the school-leaving population has the capacity for full secondary education and only one-third of this percentage, i.e. 15% of the school population has the aptitude for University education. For the sake of this small percentage and their future, the whole secondary education is straight-jacketed by and through the system of the J.M.B. and matriculation examination, with the result that justice cannot be done to other equally important objectives of secondary education."



The long standing struggle between the Joint Matriculation Board and the education departments eventually led to the various education departments conducting their own Senior Certificate examinations. The Transvaal and the Education Departments set up their own Senior Certificate examinations in the early 1920s. In the thirties the Union (National) Department of Education and the Orange Free State Education Department followed suit. The Natal Education Department was the last of the education departments to introduce its own Senior Certificate in 1953. During recent years, separate Senior Certificate examinations were instituted for Indians, Coloured and Bantu candidates under their own respective Departments.

However, with the various education departments instituting their own examinations, the Joint Matriculation Board still controls entrance requirements to the universities by establishing minimum pass requirements, approving syllabi, appointing its own external moderators and establishing norms.

Commenting on the fluctuating Matriculation results of the first fifty years of its existence Malherbe<sup>(68)</sup> remarks:

".....it is clear that chance was more powerful in determining the number of passes and failures than any efforts of the examining body to maintain consistency in the standards of the matriculation examination during that time. Such chance variations also undoubtedly had serious social and economic consequences for the individual concerned. A

variation of say 10% in the failure rate from one year to another must have involved the careers of a few hundred students at a time-determining as it did, whether they could go to university or not.

The fortuitous fact that they were born in a particular year made all the difference."

With the emergence of several examining bodies further difficulties were encountered. Pass and failure rates not only varied from year to year but also from authority to authority.

Malherbe illustrates the changing pass and failure rates in the Matriculation examination from 1925 to 1972 and remarks that the pass rates not only fluctuated from year to year, but also that they, (under the different examining departments) sometimes moved in opposite directions in the same year as the result of a change in the regulations applicable to all examining bodies.<sup>(69)</sup>

It was no doubt that these seemingly random variations in the pass rates were due to changes in the regulations determining the minimum pass marks both in individual subjects and in the aggregate and also to the grouping of compulsory subjects. Prior to March 1931 candidates could qualify for Matriculation under two sets of conditions - (a) 'Interim' regulations and (b) 'New' regulations. Under (a) subjects were divided into three groups. Candidates had to obtain at least 30% in each of six subjects and a minimum of 1 320 marks in the aggregate. Under (b) subjects were divided into six groups. A candidate could obtain a Matriculation certificate by passing either in five or six subjects. If he took five subjects he was not allowed to include any of the subjects from the sixth group which consisted



mostly of subjects of a practical nature, such as book-keeping, typing, music, mechanical drawing, etc.; and he also had to take three of the subjects on the higher grade. Both those taking five, and those taking six subjects, had to attain 40% in each subject to pass, but there was no aggregate minimum.

In November 1931 further changes were effected, the most important of which was that the pass mark for individual subjects was reduced from 40% to 33½% and an aggregate pass mark of 40% was stipulated.

According to Malherbe the main effects of these changes were: there was a slight increase in the percentage of passes in the Joint Matriculation Board's examinations and also in the passes of the Cape examinations after 1932. In the Transvaal, however, the percentage of passes declined from about 70% in 1935 to below 60% in 1937. During the early years of the second world war, the percentage of passes in the Transvaal increased while those of the Cape and of the Joint Matriculation Board declined. (70)

In November 1942 changes were introduced in the 'interim' regulations. The pass mark for individual subjects was raised from 33½% to 40%. A candidate was, however, allowed to pass in only five instead of six subjects. The result was that over the next few years there was a slight decrease in the percentage of passes in the Joint Matriculation Board's examination, and in the Cape and Transvaal examinations, whereas the percentage of passes in the Orange Free State increased dramatically from 48% to 62% at the same time.

In 1948 an additional condition was introduced to the effect that among the compulsory subjects there was a choice between a third language and mathematics. Also the minimum aggregate was raised

from 700 to 780 marks. During the next few years this extra condition placed the Transvaal on a plateau for several years with over 70% passes, while the Cape and Orange Free State oscillated within a range of between 60% and 65% passes and Natal fluctuated with about 55% passes and exceeding only once, viz. in 1956.

In Natal, the Indian candidates were severely handicapped with the compulsory requirement of mathematics or a third language. Under the Natal Education Department 98% of the Indian candidates took Latin as the second language. Afrikaans was taken by only a very few candidates. In view of the limited choice in the second languages, the majority of Indian candidates had no option but to offer mathematics in place of a third language. These were the two subjects that caused many candidates to fail.

The option of a third language in place of mathematics boosted the pass rates in Afrikaans medium schools because apart from English, Afrikaans and mathematics, such schools opted for the "less lethal subjects, e.g. biology and German". (71)

The raising of the aggregate from a minimum of 780 to 800 marks in 1950 did not have any appreciable effect on the provincial examinations. However, when the minimum for the aggregate was raised from 800 to 1 000 marks in 1960, i.e. from 40% to 45%, the results of this were clearly seen in the drop in the percentage of passes in the Transvaal examinations as well as in the Joint Matriculation Board examination. The rapid all-round increase in the number of Matriculation exemption passes in 1971 was due to a change in the requirements by which it was possible for a candidate to obtain Matriculation exemption without having passed either in mathematics or



in a third language. The relaxation in the regulations had a beneficial effect on the Indian candidates from 1972 onwards. This is a point to which further attention will be paid in the next chapter.

To conclude this section on the evolution of the Matriculation examination, it will be worth quoting in full what a former Director of Education in New Zealand had to say on the changing examination standards. (72)

"It is usual to speak of examinations as hurdles or gateways, but the metaphor is deceptive in one respect. Gates and barriers are relatively fixed things, but examination standards tend to constantly be on the move. The name of an examination, to be sure, stands firm to all the winds that blow, but its meaning, its value, drifts before any breeze. This change in the standards of an examination is difficult not only to prove, but even to become aware of. To the pupils passing through it no less than to the man in the street a country's examination system seems fixed and stable as the stars, and no less awe-inspiring. Glance even casually at its history and the eternal quality vanishes, and it seems as haphazard, shifting and uncertain of itself as any institution could well be. Prescriptions change, marking systems change, purposes change, examinations grow, flourish and die; and yet at any given moment the system has all the sanctity of immutable antiquity and its standards are verities to be defended with one's life."

#### 2.5.2.6.4 The Natal Senior Certificate Examination: 1953 to 1965

In 1953 the Natal Education Department introduced its own Senior Certificate Examination. The regulations governing the Senior Certificate Examination in that year were as follows:<sup>(73)</sup> The subjects to be offered by a candidate had to be six in number selected in the following manner: (i) English A or Afrikaans A, (ii) An official language (Afrikaans or English) not taken under (i) above, on either the A or B grade, or Zulu A or Southern Sotho A (for pupils in Native schools). In special circumstances the Director of Education allowed an alternative subject to the official language. This alternative subject had to be another language from section A of the list of subjects, (iii) one subject from physical science, physics, chemistry, mechanics, biology, botany and zoology. (iv) Three other subjects selected as follows: (a) mathematics or mathematics higher or a language other than English or Afrikaans, (b) one other subject from section A of the list of subjects, (c) one other subject chosen from either Section A or B of the list of approved subjects. In addition oral tests in Afrikaans B, English B, French, German and Zulu B formed part of the examination. Marks were to be allocated by the teachers concerned. The oral marks were submitted to the Education Department. Maximum marks for the various subjects were assigned as follows: English A, Afrikaans A, Southern Sotho A, Zulu A and mathematics higher; 400 marks each. All the other subjects were assigned 300 marks each.

#### Requirements for a pass in the Natal Senior Certificate Examination

(a) The minimum mark required for a pass in English A, Afrikaans A, Zulu A, Southern Sotho A or mathematics higher was 150 and 100 marks in all other subjects.



- (b) In order to obtain a Senior Certificate, a candidate had to in one and the same examination: (i) pass in an official language on the A grade; (ii) pass in four other subjects (iii) obtain a minimum aggregate of 760 marks.

A candidate who took two languages on the A grade and failed in one of them was considered to have passed in that language on the B grade, if he obtained at least 30% of the marks in that subject. A candidate who took mathematics higher and failed to obtain the required minimum for a pass was considered to have passed mathematics if he had obtained at least 30% of the marks in mathematics higher. No marks below 25% in any subject was added to a candidate's aggregate.

Requirements for the Natal Senior Certificate Matriculation Exemption

In order to obtain the Natal Senior Certificate Matriculation exemption a candidate had to: (a) conform to the requirements for a pass in the Senior Certificate examination, (b) obtain at least 40% in each of the four subjects under (i) to (iv) above, (c) pass in a fifth subject selected from Section A of the list of approved subjects, and (d) pass in either Afrikaans or English or in mathematics or mathematics higher.

Candidates who had obtained a minimum aggregate of 1 260 marks and otherwise conformed to the requirements of a pass were designated as having passed with merit. All candidates who had fulfilled the minimum requirements of the Joint Matriculation Board had their certificates endorsed with a declaration of exemption signed by the Secretary of the Board.

In 1963 minor changes were made to the requirements for passing the Natal Senior Certificate examination. The pass mark in individual subjects was set at 33½% in all subjects. The 1953 pass requirements were 37,5% in English A, Afrikaans A Zulu A, Southern Sotho A and mathematics higher and 33½% in all other subjects.

2.5.2.6.5 Changes brought about as a result of the introduction of streaming in White schools: 1966 to 1971

When Indian education was taken over by the Department of Indian Affairs in 1966, Indian candidates continued to write the Natal Senior Certificate examination set by the Natal Education Department. From 1972 to 1974, however, the Indian candidates wrote the same examination as the White candidates in Natal, but under the Senior Certificate examination rules of the Department of Indian Affairs.

In 1965 the Natal Senior Certificate examination was based on the system of streaming (Advanced and Ordinary Grades). Since the system of streaming only applied to the White candidates, they were allowed to write the examination on either the Advanced or Ordinary Grade, depending on which stream they were classified at the beginning of the year in which they were in Standard VII. In the absence of any form of streaming in Indian schools, all candidates from 1965 to 1967 had no option but to write on the Advanced Grade.

Separate examination papers were set for the Advanced and the Ordinary Grade. However, certain papers were set as common papers for both the grades. Latin was set only on the Advanced Grade. Under the system of streaming it was not possible for a candidate to write



certain subjects on the Advanced Grade and others on the Ordinary Grade. All six or seven subjects had to be written on a particular grade, except where the subjects were set only on one common grade.

The pass requirements for the Senior Certificate examination under the system of streaming, differed only very slightly from the rules for this examination prior to streaming. The following were the most important changes in the rules governing the Natal Senior Certificate examination under the system of streaming. (74)

(i) Prior to streaming all candidates had to offer only six subjects. Under the 1965 rules, candidates were allowed to offer either six or seven subjects. In the seven subject examination if a candidate obtained less than 25% of the maximum marks in one or more subjects, the marks in the subject in which the lowest marks were obtained were excluded from the aggregate. (ii) In the 1965 rules a candidate who offered additional mathematics received separate symbols for mathematics and additional mathematics. Marks below  $33\frac{1}{3}\%$  in additional mathematics were not counted towards the aggregate. Prior to this, a candidate could take mathematics higher, and if he failed to obtain 150 marks out of 400 marks, he was considered to have passed mathematics, provided he obtained at least 30% of the marks in mathematics higher. (iii) In the 1965 rules the classification of pass was: Senior Certificate - 760 marks and 850 aggregate marks for a six subject and seven subject examination respectively. To pass with merit, the marks were 1 140 and 1 250 for the six subject and seven subject examination respectively. Prior to this date the aggregate for the six subject examination was 760 marks and to pass with merit the requirement was 1 260 marks in the aggregate.

(iv) For Matriculation exemption the only difference appears to be that, after streaming the minimum aggregate was set at 860 marks for a six subject examination and 950 marks for a seven subject examination. No specific aggregate is mentioned in the 1953 rules. Presumably it was the same aggregate of 760 as for the Senior Certificate examination.

## 2.6 SOME ASPECTS OF INDIAN SECONDARY EDUCATION UNDER THE DEPARTMENT OF INDIAN AFFAIRS DURING THE PERIOD 1966-1977

In this section attention will be paid to the outcome of the transfer of Indian education from the provinces to the Department of Indian Affairs, with special emphasis on:

- (i) The introduction of streaming in Indian Secondary schools and the subsequent introduction of the new system of differentiated education;
- (ii) The position of Afrikaans as the second official language in Indian Schools;
- (iii) The promotion and retardation requirements of internal examinations and the rules governing the external examinations under; (a) the system of streaming, and, (b) the new system of differentiated education.

Following the pattern of separate development, education of the Indians was transferred by Act 61 of 1965 from the provinces to the Department of Indian Affairs with effect from 1 April 1966.

In respect of the school courses and the external examinations the Indians Education Act 61 of 1965, Section 21(4) made the following provisions:



"Until the Minister otherwise determines, the Department of Education, Arts and Science, shall institute the courses for the education and training of persons in special schools, homes, vocational schools, schools of industries and reform schools and conduct examinations in respect thereof, and a provincial administration shall institute courses for the education and training of persons in other State schools and State-aided schools, and conduct examinations in respect thereof, in the same manner in which it would have done if, the control of such education were still vested in that Department or, as the case may be, in the provincial administration."

#### 2.6.1 The School Curriculum

Prior to the transfer of Indian education to the Department of Indian Affairs, Division of Education, the secondary school curriculum was the same for all pupils, regardless of their aptitudes and abilities. It was of an academic grammar school type and was not liberal enough in the subjects offered.<sup>(75)</sup> Commenting on the restricted secondary school curriculum, a former Chief Inspector of Indian Education said:<sup>(76)</sup>

"not every child who passes Standard VI is fit for the only type of secondary education now available in Indian Secondary Schools, the purely academic one."

In his report on the transfer of Indian education to the Department of Indian Affairs, Mr. P.R.T. Nel<sup>(77)</sup> felt that it was essential to introduce "differentiated courses and comprehensive or composite high schools which would make it possible better to fit the education to the child and to the needs of the community."

One of the first tasks of the Division of Indian Education was the introduction of differentiation in Indian secondary schools. In a circular announcing the introduction of differentiated education in Indian schools the Director of Indian Education said: (78)

"In our opinion the high failure rate in Indian Schools is in no small measure due to the fact that pupils have to contend with subject matter and courses beyond their capabilities. It is felt therefore that suitable courses should be provided by differentiating courses and subject matter."

The two-stream system of education was introduced in Indian secondary schools in March 1967. The two streams were called "Advanced Grade" and "Ordinary Grade" and were based entirely on the pattern of the Natal Education Department. Differentiation commenced in Standard VII and continued to Standard X. Streaming was done at the end of Standard VI based on the pupil's overall performance in the Standard VI examination. However, when the system of streaming was introduced in 1967 in Indian schools, it was applied with immediate effect to all the pupils in Standards VII to X in 1967. In the absence of any "selection" examination for the pupils already in Standards VII to X in 1967, the pupils were voluntarily placed in either the Advanced Grade or Ordinary Grade. In the final examination of 1967, all Standard VII pupils were streamed on the basis of their Standard VI examination results, while certain pupils in Standards VII, VIII and IX who had failed the previous year had their failures condoned into Ordinary Grade passes. (79) In view of the voluntary method of streaming applicable to pupils who were already in Standard VII to X in 1967, very few pupils opted for the Ordinary Grade course.



The result was, that in 1967 out of a total of 1 617 candidates in the Natal Senior Certificate examination, only 16 candidates elected to write the examination in the Ordinary Grade. As normal streaming evolved over the years in the secondary schools, the position improved and the pupils were classified into the Advanced and Ordinary Grade based on the overall results of the Standard VI examination.

With the introduction of streaming, the list of subjects was extended to include subjects of a more practical bias such as typewriting, industrial arts, and housecraft.

#### 2.6.1.1 Afrikaans

As discussed elsewhere in the present study, Indian pupils under the Natal Education Department were severely handicapped in the choice of a second language. Afrikaans was not a compulsory official language for Indians. On transfer of Indian Education, the Department of Indian Affairs immediately set about to remedy this position. At its meeting in January 1968, the Joint Matriculation Board decided that all candidates with the exception of Indian candidates, had to pass both official languages (Afrikaans and English) as from 1972 in order to qualify for Matriculation Exemption. For Indian candidates this rule came into effect as from the examination of 1974. (80) The Department therefore decided that Afrikaans would become a compulsory examination subject starting in Standard VI in 1968 and progressing year by year until it became compulsory in Standard X in 1974.

By means of orientation courses, the Department of Indian Affairs was in a position to provide sufficient teachers to teach Afrikaans up to the Standard X level. Presently the two colleges of education and the Faculty of Education of the University of Durban-Westville

provide for specialisation courses in Afrikaans.

The position of Afrikaans has improved to such an extent in Indian schools that at present it is a compulsory second language in all Indian schools up to the Standard X level.

#### 2.6.1.2 The New System of Differentiated Education

One of the ten principles of the National Education Policy Act of 1967 was that: <sup>(81)</sup>

"Education shall be provided in accordance with the ability and aptitude of, and interest shown by the pupil, and the needs of the country, and that appropriate guidance shall, with due regard thereto be furnished to all pupils."

Although the National Education Policy Act of 1967 applies to the White population, the Department of Indian Affairs decided to go along with the White education departments and introduced the new system of differentiated education in Indian schools in 1973.

The new system of differentiated education is divided into four phases, namely, the junior primary phase, the senior primary phase, the junior secondary phase and the senior secondary phase. In the accompanying diagram the system as applicable to Indian education is illustrated.

The programme in the primary phase has not changed to any great extent. New syllabuses are envisaged for this phase. In the junior secondary phase which begins in Standard V, subject teaching, instead of class teaching is applied in order to orientate the pupils to secondary school approach.

Standard V is a crucial standard for the pupils, for it is a transition



THE NEW SYSTEM OF DIFFERENTIATED EDUCATION

AGE	SCHOOL PHASES		CLASS	COURSES	
				ACADEMIC COURSE	PRACTICAL COURSE
6	PRIMARY PHASE	Junior	Cl.(i)	Pupils follow ordinary course instruction ↓ Pupils follow ordinary course of instruction ↓ Pupils follow ordinary course which comprises compulsory examination subjects/non-examination subjects ↓	
7			Cl.(ii)		
8		Std. 1			
9		Senior	Std.2		
10	Std. 3				
11			Std. 4		
12	SECONDARY PHASE	Junior	Std. 5		
13			Std.6	Pupils follow ordinary course which comprises: Compulsory examination subjects Optional examination subjects Compulsory non-examination subjects	Pupils may follow the Practical Course which comprises: compulsory examination subjects Practical subjects Compulsory non-examination subjects Pupils may select and follow one of the following lines of Study: Commercial Home Economics Technical
14			Std. 7	(Pupils are advised to choose subjects which will benefit them in the field of study which they plan to follow at a later stage). ↓	
15		Std.8	Pupils select and follow a FIELD OF STUDY. Such a field comprises: Official languages Subjects characteristic to the field Supporting subjects Compulsory non-examination subjects	Pupils follow one of two lines of study TECHNICAL GENERAL Courses comprise: Compulsory examination subjects i.e. Official languages Background subjects Practical subjects Compulsory non-examination subjects	
16		Std.9	Fields include: NATURAL SCIENCES HUMANITIES COMMERCIAL GENERAL TECHNICAL HOME ECONOMICS		
17		Std.10	These courses may lead to University Entrance		

(Adapted from EDUCATION NEWS FLASHES : Transvaal Education Department.)

year to fully-fledged secondary education. At the end of Standard V, the pupils are classified into either the academic high school course or into the practical vocationally orientated course.

In Standard VI and VII, apart from the two official languages, the pupils have to take mathematics, general science, history geography, a technical subject (such as industrial art, technical drawing, workshop practice, housecraft, home economics and needlework and clothing) and two other subjects selected from accountancy, typewriting, health education, art, music, Hindi, Arabic and Tamil.

Education in the junior secondary phase is generally formative and exploratory to enable the pupil to select a field of study in the next phase.

In the senior secondary phase a candidate has to follow one of six courses or fields of study viz. general, humanities, commercial, technical, natural sciences and home economics. The examination subjects for this phase are divided into six groups: the official languages, mathematics; natural sciences; third languages; human sciences; and subjects comprising a long list covering commercial, technical, housecraft, art and music subjects.

The Department of Indian Affairs provides lists of subject-sets made up of the two official languages and four other subjects selected and arranged in such a manner that they satisfy the Joint Matriculation Board's group requirements. Subject-sets are also provided for pupils who do not wish to obtain Matriculation exemption. (82)

Subjects in the senior secondary phase are offered on the Higher Grade or the Standard Grade. Most of the Group F subjects are offered



on the Standard Grade only. The only subjects from this group which are offered on both the Higher Grade and the Standard Grade are: accountancy, technical drawing and home economics.

For the pupils who cannot derive sufficient benefit from the instruction normally provided in the normal academic course, a Practical Vocationally orientated course is offered. Although the pupils in the Practical Course take basically the same subjects as the other pupils the syllabi for these pupils are differentiated in subject content and approach. At present this course ranges from Standards VI to VIII.

In selecting a field of study, the pupils are given adequate guidance by the principals and their staff. However, the final choice of a field of study and the relevant subject-set rests with the pupil and his parents.

#### 2.6.1.3 School Guidance Service

School guidance as envisaged in the new system of differentiated education plays an important role, and in fact, it is regarded as the corner-stone of the new education programme.

The Department of Indian Affairs has appointed a Guidance Officer who is responsible for guidance and counselling in schools. Schools are provided with trained guidance teachers who function under the supervision of the Guidance Officer. The guidance teachers are responsible for psychological and vocational guidance in the schools.

The Guidance personnel are assisted by the school psychological personnel in attending to various problems related to school work.

### 2.6.2 Examination

Under the Department of Indian Affairs, there are two types of formal examination, namely, the internal school-based examination which is conducted by the principals and their staff, and the external examination, which is conducted by the Department of Indian Affairs.

The rules of procedure for conducting internal examinations are set out in the departmental circular No. 1.E.12 of 1966 issued to all schools on 3 June 1966.

The rules of procedure are based on the rules of procedure of the Natal Education Department with very minor amendments. In respect of the internal examinations, the Department of Indian Affairs allows the schools much freedom in the conduct of examinations. All schools are issued with the curricula and common core syllabi. Examination papers in the various subjects have to be based on these core syllabi.

Normally two examinations are held internally in the year. One examination is held towards the end of the second school term and the final examination is held towards the end of the fourth school term. Not more than one-third of the total marks in a subject is allowed to be assigned to the half-yearly examination.

Practical and oral marks in certain subjects form an integral part of the examination.

All examination papers in the internal school examinations have to be moderated by the principal or his deputies. It is required that at least 10% of the examination scripts be moderated by the principal or his duly appointed deputy to ensure that the marking had been thorough and equitable. If the principal feels that the marking has been either too lenient or too severe, adjustments either by lowering



or raising the marks are usually made to the marks.

After the final examination, the principals are requested to fill in the Promotion and Retardation schedules with marks obtained by each and every pupil who wrote the examination. Subjects in which a pupil failed are indicated by a red ring drawn round the subject(s). These schedules are submitted to the Inspector of Education (Circuit) who checks the schedules and either accepts or rejects the principal's recommendations in respect of pupils requiring special consideration.

In terms of section 21(4) of the Indians Education Act 61 of 1965, the provinces were, until the Minister determines otherwise, responsible for conducting examinations for the Department of Indian Affairs, in the same manner in which it would have done if, the control of education were still vested in that province. At the time when this Act was passed, the Natal Education Department conducted two external examinations, namely, the Natal Junior Certificate and the Natal Senior Certificate examinations for its White and Indian candidates. However, the Natal Education Department abolished the external Junior Certificate examination at the end of 1965. This meant that the Division of Education of the Department of Indian Affairs, on take-over of Indian education in April 1966, had to conduct this examination. For the purpose of conducting the external examinations, it became necessary for the Department of Indian Affairs to establish its own Examinations Board. One of the first functions of the Examinations Board was to phase out the Standard VI external examination. The Junior Certificate examination remained an external examination until 1972 when it was abolished as an external examination.

From 1973 onwards the Junior Certificate examination became a wholly internal examination. (83)

At present all examinations up to and including Standard IX are internal examinations. The Senior Certificate examination is the only external examination.

### 2.6.3 Promotion and Retardation procedures under the Department of Indian Affairs

#### (i) Internal Examinations under the system of Streaming

When the Department of Indian Affairs took control of Indian Education in 1966, it decided to follow very closely the promotion and retardation procedures of the Natal Education Department. On 3 June 1966, the Department of Indian Affairs issued Circular No. I.E.12 of 1966 in which it set out the promotion and retardation procedures. Since the procedure for the conduct of internal examinations was very similar to those set out under the Natal Education Department, only major changes will be considered in this section.

#### 2.6.3.1 Standard VI

When streaming was first introduced in Indian schools in 1967, it was felt that in view of the wide variations of standards of work done by the pupils, of the type of examination papers and of standard of marking in different schools, some measure of control was necessary. Therefore the following procedure was adopted:

For the examination at the end of 1967, all examination papers in the various subjects were controlled. The Department of Indian



Affairs appointed the examiners and the moderators. Mark schemes were drawn up by the examiners and were issued to all schools with Standard VI classes.

The time-table for the examination was set by the Department. The examination scripts were marked by the teachers of the schools concerned, according to a marking scheme. Inspectors of Education controlled the working by scrutinizing some of the marked scripts.

Gradually, the Standard VI controlled examination was phased out and in 1970 it became a wholly internal examination. In 1970, Afrikaans was made a compulsory second language in Standard VI from which date health education was not accepted as a substitute for Afrikaans. The pass requirements for Standard VI were similar to the pass requirements of the Natal Education Department. (see Section 2.5.6.1)

#### 2.6.3.2 Standard VII and IX

In Standards VII and IX the promotion requirements were as follows: a candidate taking the Advanced Grade course had to obtain at least 33 $\frac{1}{3}$ % in English, 33 $\frac{1}{3}$ % in at least four other subjects and an aggregate of at least 40% to be promoted into the Advanced Grade. If such a candidate failed to obtain the minimum requirements for the Advanced Grade pass, he was promoted into the Ordinary Grade, provided that he obtained at least 33 $\frac{1}{3}$ % in English, 30% in each of four other subjects and an aggregate of 35%.

A candidate taking the Ordinary Grade course had to obtain at least 33 $\frac{1}{3}$ % in English, 33 $\frac{1}{3}$ % in each of four other subjects and an aggregate of 40% in order to pass.

(ii) Internal examination under the new System of Differentiated Education

While the general procedures for conducting internal examinations remained unaltered, the new system of education made it necessary for changes in the promotion and retardation procedures.

Under the new system of differentiated education, pupils are classified into two separate grades based on the results of the schools' internal Standard V examination. The subject grouping and the minimum requirements for classification are as follows: (84)

<u>Subject Grouping</u>	<u>Standard V</u>
Group 1	: Main Language
Group 2	: Second Language
Group 3	: General Mathematics and General Science
Group 4	: History and Geography

The Minimum Requirements for Classification Standard V

Groups	Pass into Std VI Academic Course		Pass into Std VI Practical Course	
	Marks	Percentage	Marks	Percentage
1. Group 1	135 marks	45%	105 marks	35%
2. Each of two of the remaining groups	80 marks	40%	70 marks	35%
3. Aggregate	450 marks	50%	315 marks	35%

A pupil who is promoted into the Standard VI Practical Course or who fails, may repeat Standard V in order to continue in the Academic Course of study.



The Practical Course is planned to provide for the educational needs and welfare of those pupils whose aptitudes and interests are of a more practical nature and for whom the ordinary academic course does not cater effectively. It is expected that these pupils, who comprise approximately 20% of the school population<sup>(85)</sup>, will be better able to realise their potentialities to the optimum in the Practical Course. According to Jooste<sup>(86)</sup>, the pupils in the Practical Course are of the following types:

the less gifted (less able pupils with modest endowment) ;

the underachievers (but possibly with average ability) who cannot progress in the ordinary academic course on account of, inter-alia, emotional constraint and the inability to dissociate themselves from their feelings;

When the new system of differentiated education was introduced in schools in 1973, it was felt that such pupils rarely advance beyond the Standard VIII level, and on reaching the age of sixteen years, usually leave school permanently with or without the Standard VIII certificate. However, there has been a re-appraisal of this issue with the result that some White education departments have already extended the Practical Course up to and including Standard X. The Department of Indian Affairs has announced in a circular to schools that the Practical Course will be extended to the Standard X level, starting in Standard IX in 1978.

#### 2.6.3.3 Standard VI and VII : (Academic Course) Promotion Requirements

When the new system of differentiated education was introduced in

January 1973 in Indian schools, the Department allowed certain adjustments to be made in respect of the Standards VII and VIII pupils who were already on a course of study based on the old system of streaming in 1973. The old Ordinary Grade course in Standard VIII was allowed to continue until the end of 1973.<sup>(87)</sup> Pupils who entered Standard VIII for the first time in 1973 and failures of the previous year were the first batch of pupils to enter the new Senior Secondary Phase.

The following are the pass requirements in Standards VI and VII.<sup>(88)</sup> To pass from Standard VI Academic Course into Standard VII Academic Course a pupil has to:

- (i) obtain 40% in English,
- (ii) obtain 40% in each of three groups of subjects and obtain a minimum aggregate of 40%. If a pupil fails to obtain these minimum requirements he is promoted into the Practical Course Standard VII, provided he obtains a minimum of 30% in English and 30% in each of three groups of subjects and 30% aggregate.

To pass from Standard VII Academic Course into Standard VIII Academic Course, a pupil has to obtain the following minimum requirements:

- (i) 40% in English
- (ii) 40% in each of three groups of subjects,
- (iii) 40% in the aggregate.

If a candidate fails to obtain the above minimum requirements he is promoted into the Practical Standard VIII Course provided he obtains a minimum of 30% in English, 30% in three groups of subjects and



30% in the aggregate.

A pupil following the Academic Course in Standards VI or VII may repeat the Academic Course if he is promoted into the Practical Course if he wishes to continue his schooling on the Academic level.

#### 2.6.3.4 Standards VIII and IX Promotion Requirements

Standard VIII is the first stage of the Senior Secondary Phase. Pupils take six examination subjects in a particular study direction. The subjects for the examination are determined by a particular "*subject-set*" a pupil has chosen. Certain subjects are taken on the Higher Grade and others on the Standard Grade. Generally pupils taking the *subject sets* take a particular subject and the grade according to the requirement of the Joint Matriculation Board. Subjects on the Higher Grade carry a maximum of 400 marks each and the subjects on the Standard Grade carry 300 marks each. But Afrikaans as second language on the Higher Grade carries 300 marks. The requirements for passing are:

33½% in individual subjects and in the whole examination a candidate has to:

- (i) pass in English First Language on the Higher or Standard Grade,
- (ii) pass in *four* other subjects on either the Higher or Standard Grade,
- (iii) obtain a minimum aggregate of 720 marks.

A failure in a subject taken on the Higher Grade, except Afrikaans Second Language, is recognised as a pass on the Standard Grade, provided a candidate obtains a minimum of 100 marks in that subject.

In the case of Afrikaans, Second Language taken on the

Higher Grade, a mark of between 90 - 99 is recognised as a pass in Afrikaans Second Language Standard Grade.

A pupil is allowed to switch from a subject taken on the Standard Grade to the same subject on the Higher Grade, provided the pupil obtains a minimum of 180 marks (60%) in that subject on the Standard Grade as a final mark for the year. However the parents' wishes are respected in the choice of subjects and grades.

#### 2.6.3.5 The Practical Course - Standards VI to VIII

##### Promotion Requirements

For Standards VI to VIII Practical Course the subjects include three subjects in a particular direction of study. These directions are the technical direction, the commercial direction and the domestic science direction. All pupils have to take six subjects common to all, and three subjects of which at least two must be taken from the same direction of study. The subjects are grouped as follows:

Group 1 - English, Group 2 - Afrikaans, Group 3 - practical mathematics and general science, Group 4 - history and geography and Group 5 - three subjects in a particular direction of study.

The pass requirements in Standards VI to VIII are: <sup>(89)</sup>

- (i) 40% in English
- (ii) 40% in each of three of the remaining groups, and
- (iii) an aggregate of 40%.

A pupil following the Practical Course in Standards VI and VII, and who passes, may be promoted into the Academic Course in the next standard, provided he obtains at least 60% (180 out of 300) in English



and obtains an aggregate of 720 marks in groups 1, 2, 3 and 4 above. A pupil passing the Practical Course in Standards VI to VIII may repeat the Standards in the Academic Course if he wishes to continue with the normal Academic type of schooling.<sup>(90)</sup>

#### 2.6.4 External Examination Promotion and Retardation Requirements

##### (i) Under the system of streaming

There were two external examinations under the system of streaming, namely, the Junior Certificate examination and the Natal Senior Certificate examination.

##### 2.6.4.1 The Junior Certificate Examination

From 1967 to 1971 the Standard VIII Junior Certificate examination was wholly an external examination. Pupils following the Advanced Grade stream had to offer seven subjects.<sup>(91)</sup> In order to be promoted into the Advanced Grade a candidate had to obtain 33 $\frac{1}{3}$ % in English and in at least four subjects and an aggregate of 40%. A candidate taking the examination on the Advanced Grade could be promoted into the Ordinary Grade if he obtained 33 $\frac{1}{3}$ % in English, 30% in each of four other subjects and a minimum aggregate of 40%. There was provision in the rules, for a candidate who was promoted into the Ordinary Grade to repeat Standard VIII on the Advanced Grade, if he wanted to continue his schooling on the Advanced Grade.

##### 2.6.4.2 The Senior Certificate Examination

From 1966 to 1971 Indian candidates in Natal wrote the Natal Senior Certificate examination under the rules of the Natal Education Depart-

ment. The Senior Certificate examination during these years was controlled by the Natal Education Department.

With the establishment of its own Examinations Board in 1968, the Department of Indian Affairs decided to control its own Senior Certificate examination, however, from 1972 to 1974, the Department of Indian Affairs purchased the Senior Certificate examination papers from the Natal Education Department under the following conditions: (92)

- (i) The Natal Education Department would appoint European commissioners in Indian schools.
- (ii) The examination papers would be supplied direct to the commissioners appointed on the basis of figures supplied by the Department of Indian Affairs.
- (iii) The Indian candidates would follow the time table of the Natal Education Department.
- (iv) The Natal Education Department would appoint one European sub-examiner to each Indian marking committee to take charge of the marking.
- (v) The Natal Education Department would supply the marking memorandum.
- (vi) The Natal Education Department would appoint its own moderators to moderate sample scripts.
- (vii) Standard curves for Indian candidates for each subject over the previous five years, for the purpose of making statistical adjustments to the marks were to be supplied by the Natal Education Department.

Indian teachers were appointed to act as sub-examiners in the various subjects.



The rules for the Department of Indian Affairs Senior Certificate examination were set out in I.E. Circular No. 32 of 1971<sup>(93)</sup> These rules were virtually the same set of rules applicable to White schools in Natal. The pass requirements for the Departmental Senior Certificate and the Matriculation exemption remained unaltered. The only change from the Natal Education Department rules was the inclusion of Hindi and Arabic in the list of examination subjects.

Prior to the transfer of education of the Indians in the Transvaal, the Transvaal candidates were given a year mark in the various subjects. These year marks were taken into account in the final results in the Senior Certificate examination. When the Transvaal Indian candidates had to write the Senior Certificate examination of the Department of Indian Affairs with effect from 1973, the year mark was taken into account in determining their results. The Joint Matriculation Board agreed to include the year mark in respect of the Transvaal candidates,<sup>(94)</sup> for Matriculation exemption purposes. These rules and pass requirements were in force until the end of 1974 when the last candidates wrote the Senior Certificate examination under the old system of streaming into the Advanced and Ordinary Grades.

(ii) Under the New Differentiated Examination System

2.6.4.3 The Senior Certificate Examination

Under the new system of differentiated education, the Senior Certificate examination is the only external examination. In 1975 the Department of Indian Affairs introduced its own Senior Certificate examination. The first step towards the complete control of the Senior Certificate examination was the drawing up of the rules governing the Senior Certificate examination. These rules were approved by the Joint Matriculation Board. In its memorandum to the Joint Matriculation

Board, the Department of Indian Affairs set out details of the examination requirements, norms and standards based on the results of the previous five years and the condonation procedure. All syllabi used in Indian schools are based on national core syllabi. The Department of Indian Affairs is represented on all national syllabus committees. The Departmental subject committees are responsible for formulating syllabi for the various subjects, based on common core syllabi. All syllabi used in Indian secondary schools are subject to the approval of the Joint Matriculation Board.

The Joint Matriculation Board also acts as external moderators for all subjects taken for Matriculation exemption purposes. In this way standards are maintained to ensure that these conform to the standards of other education departments in the country.

The Department of Indian Affairs appoints examiners and sub-examiners from the ranks of Indian and White teaching personnel. Thus, for the first time in the history of Indian education, Indian teachers are given the opportunity of acting as examiners and sub-examiners.

Examination papers are set in the Higher and/or Standard Grades. All group F subjects except, accountancy, technical drawing and home economics are examined only on the Standard Grade. According to the rules<sup>(95)</sup> for the Senior Certificate examination the following group requirements are in force:

To obtain a Senior Certificate, a candidate for the examination as a whole shall be awarded a pass:

- (a) in individual subjects if he attains at least 133 marks on the Higher Grade (or 100 marks in Second language on the Standard Grade) and 100 marks on the Standard Grade, provided



that a failure in a subject on the Higher Grade, (except Second Language Higher Grade) may be converted to a pass on the Standard Grade if a minimum of 100 marks was obtained in such subject. In the Second Language on the Higher Grade 90 - 99 marks may be converted to a pass on the Standard Grade. The original marks obtained in such subject on the Higher Grade shall be used in calculating the aggregate.

- (b) In the aggregate, if he obtains at least 720 marks in the case of a six subject examination. In the case of a candidate offering seven subjects, the aggregate will be calculated according to the total of the six subjects in which the candidate gained the highest marks, provided (i) that both official languages on the Standard Grade or one on each grade be included in the six subjects;
- (c) In the examination on the whole if he: - (i) passes in the aggregate, (ii) passes First Language on the Higher or the Standard Grade, (iii) and passes in four other subjects. (96)

The above rules were in force until 1976. In 1977, the pass requirements in the individual subjects in the Higher Grade were raised from 133 marks out of 400 to 160 marks out of 400. (97)

#### Matriculation Exemption

The new differentiated Matriculation regulations which became operative in the November/December 1975 examinations were also applicable to the Department of Indian Affairs. The new regulations made the distinction between the matriculation and the school-leaving certificate more on the basis of the *standard of achievement in common subjects* than a participation in a greater variety of subject options. (98)

Thus, subjects may be taken on the Standard Grade or on the more demanding syllabus starting in the core subjects in Standard VIII. The examination papers of the two grades are different. The minimum for a pass on the Standard Grade is 33 $\frac{1}{3}$ % and 40% in the Higher Grade.

In order to obtain Matriculation exemption a candidate has to (i) offer at least six and not more than seven subjects chosen from the list of prescribed subjects. (ii) pass in at least five subjects in one examination, (iii) obtain an aggregate mark of at least 950, (iv) pass on the Higher Grade in at least three subjects chosen from groups A to E; with at least 40% in each, (v) pass in both official languages, at least one in the Higher Grade, (vi) offer at least one subject from each of four of the groups, provided that not more than four languages are offered. (99)

The Joint Matriculation Board also included the following provisos:

(i) only candidates wishing to enrol at a South African university for a B.Mus; a B.A. (Music); or a B.A. (Fine Arts) degree, shall be allowed to offer Music or Art on the Higher Grade from group E as one of the subjects to satisfy the requirements in (iv) above. In such cases the certificate shall be endorsed to the effect that the holder may only gain admission in the case of Music to the B. Mus. or B.A. (Music) degrees or, in the case of Art, to the B.A. (Fine Arts) degree. (ii) only candidates following a technical, an agricultural or a domestic science study course shall be allowed to offer the respective subjects (Higher Grade) selected from group F to satisfy the requirements of (iv) above. Provided further that such a person shall, in the case of the technical, the agricultural and the domestic science study course, not offer a subject on the Higher Grade from group E, provided further that in the case of the



technical, the commercial and agricultural study course, mathematics on at least the Standard Grade and, in the case of the domestic study course, mathematics or a natural science on at least Standard Grade shall be passed. However, in the case of the commercial study course, only the subject economics Higher Grade from group E is recognised for the purpose of (iv) above.

Since the above regulations were issued, the Joint Matriculation board has effected certain amendments. These are:

- (i) In order to obtain a Matriculation exemption it is now necessary for a candidate to pass the Second Language on the Higher Grade. Prior to this amendment the Second Language could be passed on the Standard Grade. (100)
- (ii) In 1975 one of the requirements for a Matriculation exemption was that the candidate had to obtain a minimum of 40% in each of at least three subjects on the Higher Grade, one of which had to be the official language. (First language on the Higher Grade) and the remaining two selected from any two from groups B, C, D, E and F (accountancy only). Prior to this date accountancy taken on the Higher Grade was only recognised as one of the three subjects on the Higher Grade for the commercial course of study. Accountancy, under the amended rule, is now recognised as one of the three Higher Grade subjects for a study direction, provided mathematics is taken at least on the Standard Grade and that accountancy remains a group F subject. (101)
- (iii) In 1975 the group requirements were that a candidate had to include among the five subjects passed, a subject from each of four different groups. In 1976 this requirement was altered

to allow candidates to include among the five subjects passed, two subjects from each of four different groups C or E and at least one subject from each of two other groups. (102)

- (iv) The Joint Matriculation Board allowed the following concession in respect of candidates who had failed to obtain the minimum aggregate for Matriculation exemption. "Such candidate shall be exempted from this requirement if he thereafter obtains a teacher's diploma within minimum duration of three years, issued by a South African university or education department, and exemption shall take effect as from the date of the teacher's diploma." (103)

As these amendments were only announced in 1976, their effect on the results of the Senior Certificate Matriculation exemption could only be gauged after the 1977 examination results.

## 2.7 THE NORMALIZING PROCEDURE

In chapter 3 of this study, which deals with the extent and incidence of *failure* in Indian secondary education, it will be noticed that the results of the Indian candidates in the Natal Senior Certificate, show extreme fluctuations, especially when this examination was under the control of the Natal Education Department. For example, in 1953 the Indian pass rate in the Natal Senior Certificate examination was as low as 26% and in 1954 and 1955, the pass rate increased to approximately 34% and thereafter remained more or less constant at the 44% level until 1960. Suddenly in 1961, the pass rate jumped to a record level of 74% and then took a downward plunge to 62% in the following year.



During this period, the results of the White candidates, writing the same examination as the Indian candidates, remained at a constant level of about 80%.

These extreme fluctuations in the results of the Indian candidates, suggest that presumably no statistical adjustments were made to the marks obtained by the Indian candidates. Generally, when statistical adjustments are made to the raw examination scores by the use of percentile or ogive curve, the examination results do not show extreme fluctuations.

According to Malherbe<sup>(104)</sup> some examining bodies did make use of the percentile or ogive curve for statistical adjustments as long ago as 1930. These attempts at adjustments were, however, of a sporadic nature. The next step towards stabilization was to adjust the distribution of the marks obtained by the candidates according to the average distribution of the unadjusted marks obtained during the previous five years in a particular subject. It was realized that this method had the weakness in that the marks scored in a particular abnormal year in the past might distort the standard to be applied in future years in that subject. On the other hand, to stick too closely to adjusted averages would lead to rigidity and preclude future improvement in the standards of evaluation.

Thus in the early 1970s, the Joint Matriculation Board resorted to the 'standard distribution' procedure by using the average of previous years' distribution as a guide in order to determine only the following two points on the cumulative percentile graph paper used for the purpose of plotting the distributions: (a) the point indicating the percentage

of *failures* (i.e. marks below 33½%) and (b) the point indicating the percentage reaching *distinctions* (i.e. A,s: 80%). These points were joined by a straight line which then represented the 'standard distribution' or norm according to which the adjustments in the distribution of marks obtained in a particular examination had to be made, by adding or subtracting marks according as the graphs of these two distributions deviated from each other. The 'standard distribution' line also determined the standard median percentage mark in that subject.

The 'standard distribution' obviously varied from subject to subject. In some subjects such as mathematics or physics, the marks obtained were usually more widely spread along a scale from 0% to 100% than in such subjects as history and the home languages. In the latter kind of subject, there was less dispersion and the marks tended to cluster more closely around the mean.

Obviously, the degree of differentiation between the candidates varied mainly according to the traditional methods of examining which had developed over the years in those subjects. For example in history, where the essay type of questions prevailed, there was poor differentiation. It was less possible for a brilliant candidate to obtain between 90 and 100% in history than in a subject like mathematics where the type of examination differentiated more effectively between the varying abilities of the candidates.

Malherbe<sup>(105)</sup> presents the adjusted norms approved by the Joint Matriculation Board in respect of the six subjects commonly taken by candidates for Matriculation in the examinations conducted by the various examining authorities. These subjects are: English Higher Grade, Afrikaans Higher Grade, mathematics, history, geography and



science.

The approved norms were to serve as a guide for each of the nine examining bodies in determining the percentage of candidates who should fail and the percentage of candidates who should pass with distinctions in each subject.

In the table below, the adjusted percentage of candidates who should be failed in the various subjects taken for the Matriculation examination in 1974 for each of the examining bodies, are presented.

TABLE 2.11

NORMS FOR THE PERCENTAGE OF CANDIDATES WHO SHOULD FAIL IN THE MATRICULATION SUBJECTS APPROVED BY THE JOINT MATRICULATION BOARD FOR 1974

Examining body	English H.G.	Afrikaans H.G.	Maths.	History	Geog.	Science
Cape	4,0%	2,0%	18,0%	9,0%	8,0%	9,0%
Natal	3,0%	2,0%	20,0%	8,0%	12,0%	12,0%
Transvaal (excludes project)	0,9%	0,9%	20,0%	4,5%	5,0%	5,0%
O.F.S.	2,0- 2,5%	2,0- 2,5%	14,5- 16,5%	12,5- 14,5%	12,5- 14,5%	12,5- 14,5%
J.M.B.	2,0%	-	15,0%	9,0%	10,0%	13,0%
National	14,0%	7,5%	56,0%	-	32,0%	25,0%
Coloureds	6,0%	5,0%	42,0%	26,0%	22,0%	22,0%

Note: In the JMB examinations there were very few candidates taking Afrikaans.

Source: Malherbe, E.G. *Education in South Africa*. Vol.2. p 505

From the approved norms for failure in the various subjects it will be seen that the norms not only differed from subject to subject but also as between the various examining bodies. This was because the standard or norm for each examining body was in terms of its own past practice in evaluating the performance in its own particular candidate population. Though the adoption of a system of norm gives a semblance of validity, there is no way of ensuring its comparability as between the various examining bodies or even between the different subjects.

To arrive at comparable norms for the non-White candidates the Joint Matriculation Board arbitrarily decided to apply to the Bantu candidates the same norms as those of the Department of National Education. To the Indians, the norms of the White Natal Education Department were applied. The Coloureds were given the norms of their own, somewhere in between those of the Bantu and the Indian. (106)

The whole idea of using a particular norm for failing a certain percentage of candidates each year is based on the assumption that there is a greater measure of stability in the results. Reduced to simple terms, this procedure endeavours to maintain that it is better to have a norm in the form of a percentage of candidates who should fail in particular subject than an arbitrary pass or fail mark (currently 33½% or lower). The latter, being dependent upon subjective factors in interpreting the syllabus and in setting and marking the examination papers, is much more likely to vary in a random manner than the former.

From the foregoing, it will be seen that *failure* is built into the examination system. However, the application of the normalizing pro-



cedure in the Senior Certificate examination in recent years in respect of the Indian candidates, has brought about a great all round improvement in the results obtained by the Indians.

#### REFERENCES

1. Naidoo, B.A. : "Indian Education with Special reference to Socio-Economic Aspects." *The Teachers Journal* XVIII No. 2 Nov. 1969 pp.16-17.
2. Suid-Afrikaanse Buro vir Rasse - *Aangeleenthede, 1975 Indiërbevolking van Suid Afrika*, Pretoria p.12.
3. Booyens, J., Alsopp, V.M., Naidoo, P.L., Makan, C.V., Manjoo and Campbell, G.D., : The Nutritional somatometric and Socio-economic status of twenty Chatsworth Indian Households *University of Durban-Westville Journal* 2(1) Nov. 1973 : pp.29-45.
4. Naidoo, B.A. op. cit., p.17.
5. Department of Economics, University of Natal : *A Survey of Indian Housing in Durban*.
6. Department of Economics , University of Natal "The Indian Domestic Budget" *Additional Report No. 6 of Natal Regional Survey - Keartlands Durban* 1969 p.73.
7. Department of Statistics - *Population Census 1970* 8 December 1975 p.4.
8. Naidoo, B.A. op. cit., p.17.
9. Ibid., p.17.
10. Van der Walt, N.: "Nursery School Education, Department of Indian Affairs" in *Early Childhood Education: The Nursery School Association of South Africa*. p.22.
11. Lotter, J.M.: *Socio-Ekonomiese Opname van Indiërs in Natal. Deel 4 : Opvoedkundige Peil en Skool Bywoning* - Human Sciences Research Council Pretoria 1975.
12. Osman, E.: "Education and the Indian Girl" *Fiat Lux* Vol. 10, No. 3 April 1975 p.6.
13. Naidoo, B.A. op. cit., p.17.
14. Ibid., p.19.
15. Natal Indian Teachers' Society : *"Silver Jubilee" 1925-1950* p.15.

16. Behr, A.L. and MacMillan, R.G.: *Education in South Africa*, Van Schaik Pretoria, 1971 p.421.
17. Ibid., p.421.
18. Natal Indian Teachers' Society, op. cit., p.16.
19. Naidoo, K.P.: "Secondary Education for Indians in Natal" *Teachers' Journal* - Organ of the South African Indian Teachers' Association Vol. XVI May 1967 No. 1 p.12.
20. Ibid., p.12.
21. Ibid., p.12.
22. Ibid., p.18.
23. Behr, A.L. and MacMillan, R.G., op. cit., p.425.
24. Behr, A.L.: "Historical Perspectives to Indian Education" *Fiat Lux* Vol. 5 No. 9 November 1970, p.10.
25. Ibid., p.10.
26. Nel, P.R.T.: *Report on Education for Indians in South Africa*. Unpublished Report to the Minister of Indian Affairs, Annexure B. June 1964 p.70.
27. Province of Natal *Report of the Provincial Education Committee (The Wilks Report) 1946*, p.60.
28. Ibid., p.60.
29. Malherbe, E.G.: *Education in South Africa* Vol.II 1923-1975. Juta and Co. Ltd. Cape, 1977 p.243.
30. Ibid., pp.243-244.
31. Ibid., p.244.
32. Ibid., p.244.
33. Ibid., p.245.
34. Ibid., p.245.
35. Ibid., p.245.
36. Province of Natal: op. cit., p.135.
37. Behr, A.L. and MacMillan, R.G., op. cit., pp.152-153.
38. Ibid., p.153.
39. Ibid., p.153.



40. Ibid., p.171.
41. Ibid., p.425.
42. Department of Indian Affairs - Division of Education File No.  
20/6/2
43. Behr, A.L. op. cit., p.10.
44. Wall, W.D., Schonell, F.J. et al.,: *Failure in School - an International Study* UNESCO Institute for Education, Hamburg, 1972 p.3.
45. Ibid., p.2.
46. Ibid., p.3.
47. Ibid., p.3.
48. Ibid., p.3.
49. Ibid., p.17.
50. Jenkins, A.J. cited by G.W. Miller - *Success, Failure and Wastage in Higher Education* The University of London Institute of Education - George Harrop, London 1970 p.18.
51. Van Vliet cited by Wall et al. op. cit., p.18.
52. Wall, W.D. et al. op. cit., pp.17-18.
53. Van der Walt, N.: *Failure at School - Part 1" Fiat Lux* Vol. 7, No. 9. Nov. 1972 pp.18-19.
54. Silberman, C.: *Crisis in the Classroom - The Remaking of a Nation*, Vintage Books , New York 1970.p.347.
55. Niven, J.: "Assessment of What and for What in the Primary School *The Transvaal Educational News* Vol. LXXIV No. 8 Aug. 1977. pp.15-17.
56. Dobie, B.A.: cited by Niven, J. op. cit., pp.12-14.
57. Natal Education Department: *Schools Hand book Directions for the Conduct and Control of Government European and Government and Government Aided Indian Schools -* pp.159-175.
58. Behr. A.L. and Macmillan op. cit., p.171.
59. Ibid., p.186.
60. Province of Natal op. cit., p.221.

61. Malherbe, E.G., op. cit., p.429.
62. Ibid., pp.429-30.
63. Ibid., p.437.
64. Ibid., p.442.
65. Ibid., p.442.
66. Ibid., p.431
67. Ibid., p.431.
68. Ibid., p.443.
69. Ibid., p.444.
70. Ibid., p.446.
71. Ibid., p.448.
72. Beeby, C. cited by Malherbe, op. cit., p.420.
73. Natal Education Department - Correspondence File 39/1/10 dated 3 October 1977.
74. Natal Education Department - *Senior Certificate Examination Handbook 1966*. pp.4-13.
75. Lazarus, A.N. cited by P.R.T. Nel - *Report on Education for Indians in South Africa*, unpublished report to the Minister of Indian Affairs Annexure B, 29 June 1964. p.11.
76. Nel, P.R.T., op. cit., p.13.
77. Ibid., p.28.
78. Department of Indian Affairs - (Division of Education) Circular I.E. No. 27 of 1967 File No. 19/30/1
79. Department of Indian Affairs - (Division of Education) Report for the year 1968. p.47.
80. Department of Indian Affairs - (Division of Education) Circular I.E. No. 22 of 1968 File No. 19/15/6/2.
81. Malherbe, E.G., op. cit., p.351.
82. Naguran, C.A.: "Differentiated Education well on its way." *Fiat Lux* Vol. 10 No. 6 June/July 1975 p.19.
83. Lloyd, W.B.: External Examination - A brief History - *Fiat Lux* Vol. 10, No. 1 Feb. 1975 pp.6-7.
84. Department of Indian Affairs - (Division of Education) Circular Minute BD of 1972 File No. 19/30/1.



85. Department of Indian Affairs - (Division of Education) Circular No. 28 of 1972 File 19/15/6/2.
86. Jooste, J.H.: "Assessment in Differentiated Education" Lecture delivered at the National Conference on Evaluation in Education. July 2-5 1974 p.16.
87. Department of Indian Affairs - (Division of Education) Circular Minute I.E. No. BD of 1972 - File No. 19/30/1.
88. Department of Indian Affairs - (Division of Education) Circular Minute BB of 1975 File No. 19/20/6/1.
89. Department of Indian Affairs - (Division of Education) Circular Minute AW of 1973 File No. 19/30/1.
90. Ibid.
91. Department of Indian Affairs - (Division of Education) Circular No. I.E. 27 of 1975 File No. 9/34/1/16.
92. File No. 19/20/2.
93. Department of Indian Affairs - (Division of Education) File No. 19/20/2.
94. Department of Indian Affairs - (Division of Education) File No. 19/20/2.
95. Department of Indian Affairs - (Division of Education) Circular No. I.E. 27 of 1975 File No. 9/34/1/16.
96. Ibid.
97. Department of Indian Affairs - (Division of Education) Circular No. I.E. 4 of 1977 File No. 9/34/1/16.
98. Malherbe, E.G., op. cit., p.526.
99. Department of Indian Affairs - (Division of Education) Circular No. I.E. 27 of 1975 File No. 9/34/1/16.
100. Department of Indian Affairs - (Division of Education) Circular No. I.E. 25 of 1977 Schedule B File No. 9/34/1/16.
101. Department of Indian Affairs - (Division of Education) Circular No. I.E. 32 of 1976 File No. 19/20/10/3.
102. Department of Indian Affairs - (Division of Education) Circular No. I.E. 25 of 1977 File No. 9/34/1/16 Schedule B.
103. The Joint Matriculation Board: Matriculation Examination Handbook, 1977 Pretoria Part 1 p.56.
104. Malherbe, E.G., op. cit., p.503.
105. Ibid., p.505.
106. Ibid., p.509.

## CHAPTER THREE

## 3. THE INCIDENCE AND EXTENT OF FAILURE IN INDIAN SECONDARY EDUCATION WITH SPECIAL REFERENCE TO NATAL

3.1 INTRODUCTION

In this chapter the incidence and extent of *failure* in Indian secondary education, flowing from the issues raised in the previous chapter will be presented and discussed in the following order;

- (i) data on *failure* as reflected in the schools' examinations promotion and retardation schedules.
- (ii) data on *failure* as reflected in the published results of the external examination conducted by an outside authority, in this case the Natal Education Department and the Department of Indian Affairs.

3.2 FAILURE AS REFLECTED IN THE SCHOOLS' INTERNAL EXAMINATION SCHEDULES

In respect of the internal examinations, only data extracted from the records of the Department of Indian Affairs will be considered.

As discussed in the previous chapter, the external Standard VI examination was gradually phased out first, by the introduction of a system of controlled examination in 1968, where the Department of Indian Affairs set the examination papers and provided the marking memoranda for the schools to mark their own examination scripts. In 1970 the number of controlled examination papers was reduced to three. In 1972 the Standard VI examination became a wholly internal examination.

The Junior Certificate examination continued to be an external examination after the transfer of Indian education to the Department of Indian Affairs. However, from 1972 this examination became an internal examination

In the discussion of the incidence of *failure* in the internal examination, the results of the Standard VI examination since 1968 will be



considered. In respect of the Standard VIII examination, the results after which this examination became an internal examination in 1972, will be considered in this section.

### 3.2.1 Results of the Standard VI Examination

#### (i) Under the System of Streaming

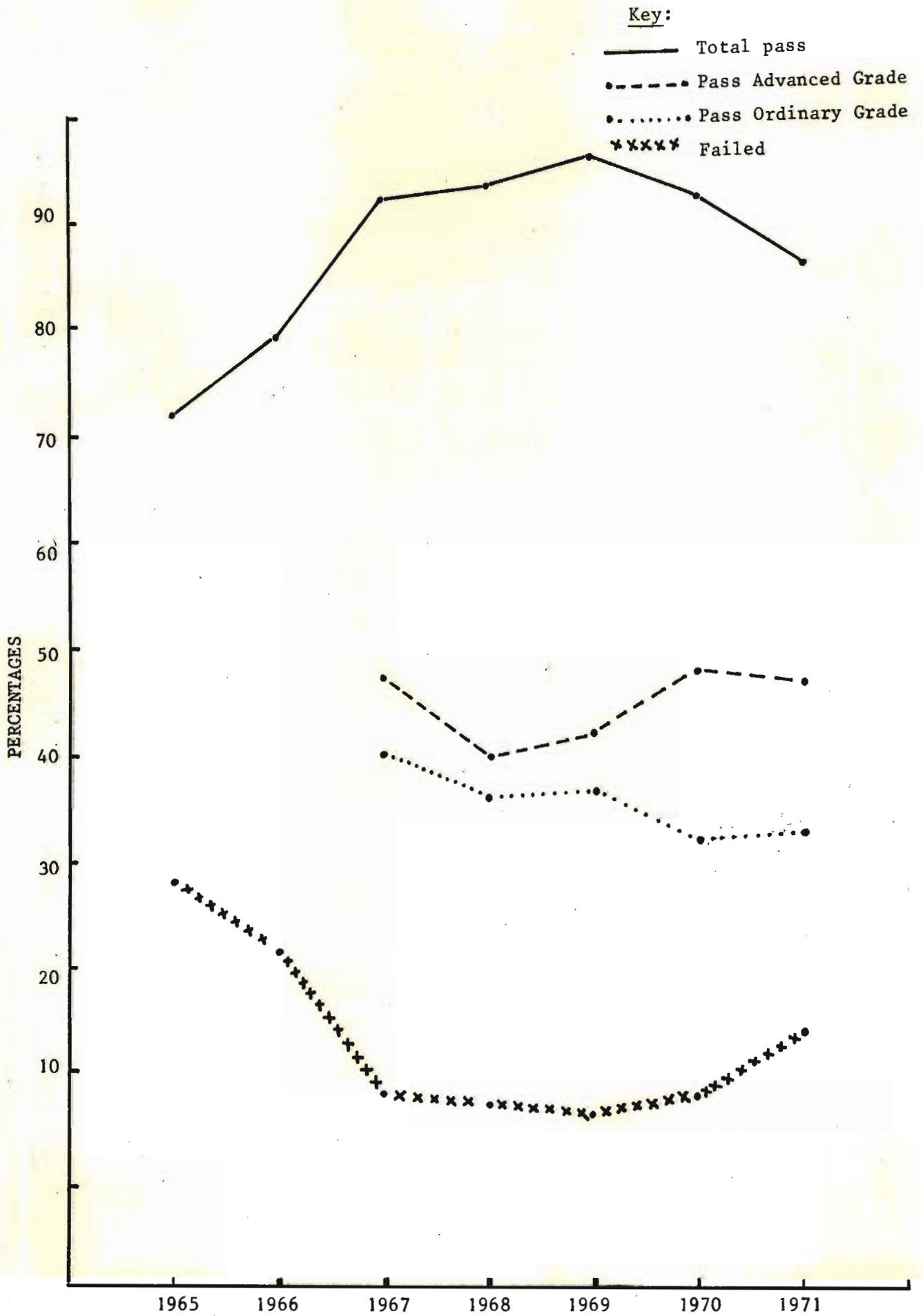
The results of the Standard VI examinations are graphically illustrated in Figure 3.1. From 1968 to 1971, the Standard VI examination was a controlled examination, in which the Department of Indian Affairs set the examination papers in a few selected subjects and provided the schools with the marking memoranda. School personnel marked the examination scripts. During this period the Standard VI examination results improved considerably, reaching the above 90% level.

The possible reason for the general improvement in the Standard VI results could be the introduction of streaming in Indian schools. Prior to streaming, a Standard VI candidate could either pass with a continuation certificate or pass with a school leaving certificate. With the introduction of streaming, a Standard VI candidate could pass either on the Advanced Grade or the Ordinary Grade or obtain a school leaving certificate.

Moreover, most of the Standard VI candidates were from the primary school stage. Teachers in the Standard VI classes in the primary schools were presumably highly motivated to achieve good Standard VI examination results. In the overall assessment of a teacher applying for promotion in a primary school, the

FIGURE 3.1

Standard VI Results: 1965-1971





Standard VI examination successes attained by his pupils were probably taken into account.

(ii) Under the New System of Differentiated Education

In 1973 the Department of Indian Affairs introduced the new system of differentiated education. The Standard VI examination was wholly an internal examination under this educational programme.

The Standard VI examination results for 1973 to 1975 are presented in Table 3.1.

TABLE 3.1

THE RESULTS OF THE ACADEMIC COURSE STANDARD VI INTERNAL EXAMINATION UNDER THE NEW SYSTEM OF DIFFERENTIATED EDUCATION IN ALL INDIAN SCHOOLS IN THE REPUBLIC : 1973-1975

Year	NUMBER WHO WROTE	PASSED				FAILED	
		ACADEMIC GRADE	%	PRACTICAL GRADE	%	NUMBER	%
1973	11 131	8 903	79,98	1 927	17,31	301	2,71
1974	7 883	6 125	77,69	1 448	18,37	310	3,94
1975	8 380	6 589	78,62	1 527	18,25	262	3,12
Totals	27 394	21 617		4 902		873	
Average	9 131	7 205	78,76	1 634	17,97	291	3,26

(Source : Promotion and Retardation Schedules - Division of Education - Department of Indian Affairs)

The results presented in Table 3.1 are in respect of the Academic Course pupils only. This means that all the pupils in the Academic Course Standard VI in 1973 to 1975 as presented here, are already a selected group by virtue of having passed a qualifying examination in Standard V. Those pupils who did not satisfy the requirements for the Academic Course were either promoted into the Practical Course Standard VI if they satisfied the minimum requirements, or failed.

In 1973 there were 11 131 pupils who wrote the Standard VI Academic Course examination. Of this number 8 903 pupils, or 79,98% passed into the Standard VII Academic Course and 1 927 or 17,31% passed into the Standard VII Practical Course and 301 pupils failed. In 1974 the number who wrote the Standard VI Academic Course was 7 883 pupils representing a drop of 3 248 pupils or 29,17% in one year. This drop in the number of pupils who wrote the Academic Course Standard VI in 1973 could possibly be attributed to the fact that prior to the introduction of the new differentiated education system in 1973, pupils in Standard V were either promoted or failed. There was no Practical Course.

The results in Table 3.1 show that there was more or less a consistent percentage of pupils passing on the Academic grade. The average percentage of passes into the Academic Course Standard VII is 78,76%. However, an average of 17,97% of the Academic Course pupils failed to pass into the Academic Course Standard VII but only managed to pass into the Practical Course Standard VII over the three years and an average of 3,26% of this Academic Course Standard VI pupils failed.



It must be remembered that all the pupils in the Academic Course Standard VI in the three years under discussion were already a selected group and yet approximately 4 902 out of 27 394 or 17,97% of the Academic Course pupils were placed in the Practical Course.

A pertinent question here is whether the Standard V examination is a valid predictor for purposes of classifying pupils into the Academic and Practical Courses. According to the Department of Indian Affairs only about 20% of the pupils should fall into the Practical Course<sup>(1)</sup>. To get a clearer picture of the situation, Table 3.2 shows the total number of the pupils both in the Academic Course and the Practical Course and their results for the years 1973 to 1975.

TABLE 3.2

RESULTS OF THE COMBINED ACADEMIC AND PRACTICAL COURSE STANDARD VI EXAMINATION UNDER THE NEW SYSTEM OF DIFFERENTIATED EDUCATION IN ALL INDIAN SCHOOLS IN THE REPUBLIC : 1973-1975

YEAR	NUMBER WHO WROTE	PASSED				FAILED	
		ACADEMIC GRADE	%	PRACTICAL GRADE	%	NUMBER	%
1973	15 646	9 096	58,1	5 602	35,8	948	6,1
1974	11 834	6 207	52,5	4 731	39,9	896	7,6
1975	12 237	6 822	55,7	4 784	39,1	631	5,2
Total	39 717	22 125		15 117		2 475	
Average	13 239	7 375	55,43	5 039	38,26	825	6,3

Source: Promotion and Retardation Schedules - Division of Education, Department of Indian Affairs

The data presented in Table 3.2 are in respect of all the Standard VI pupils who wrote either the Academic Course Standard VI examination or the Practical Course Standard VI examination during the years 1973 to 1975. According to Table 3.2 approximately 38,26% of the total Standard VI pupils in the three years under discussion were promoted into Standard VII Practical Course. In 1974 and 1975 the percentage of promotion into the Practical Course Standard VII is approximately 40%. This is twice the expected distribution of the Practical Course pupils, who, according to the calculation of the Department of Indian Affairs, should be in the region of 20%.

The percentage of *failures* was an average of 6,3 for the three years.

### 3.2.2 Results of the Standard VII Examination

#### (i) Under the System of Streaming

From an analysis of the *failure* rate in the Standard VII examination, presented in the table below, it will be seen that the average *failure* rate in the Advanced Grade was about 18% per year. The average *failure* rate in the Ordinary Grade appears to be quite high at 34,7%.

TABLE 3.3

FAILURE RATE IN THE STANDARD VII EXAMINATION: 1967-1972

Year	Advanced Grade	Ordinary Grade
1967	18,8%	44,7%
1968	20,0%	32,0%
1969	19,2%	31,6%
1970	20,5%	33,4%
1971	15,9%	34,9%
1972	16,0%	32,0%
Average % per year	18,42%	34,7%



The results of both the Advanced and Ordinary Grades are graphically represented in Figure 3.2.

While the results in the Advanced grade examination appear to be improving progressively, there is a high *failure* rate in the Ordinary Grade.

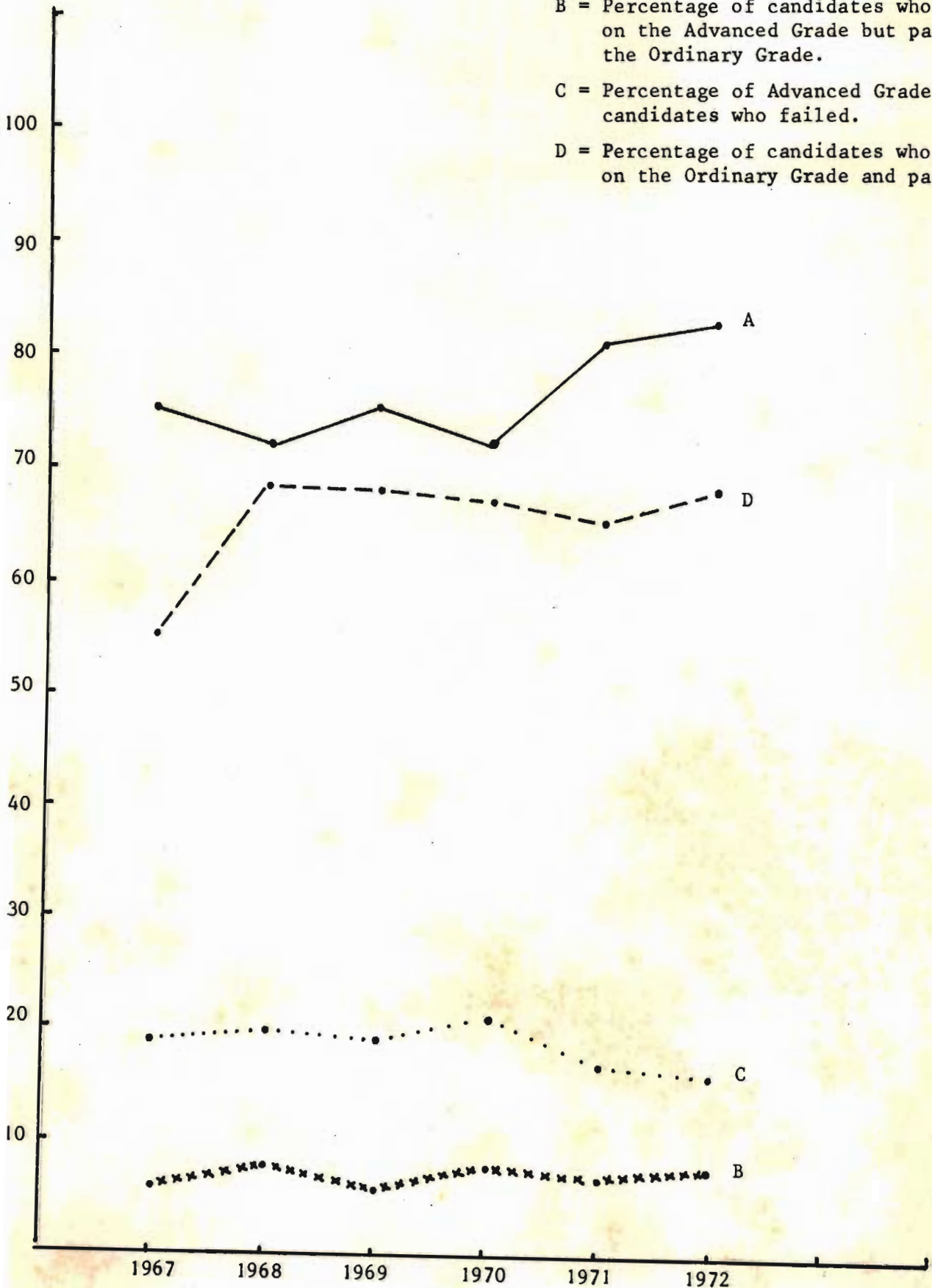
The high *failure* rate in the Ordinary Grade examination suggests that this grade was beyond the ability range of many pupils. According to Behr and MacMillan<sup>(2)</sup>, below average pupils could not be termed "Ordinary". In fact the Lighton Committee<sup>(3)</sup> suggested that there should be three streams, A, B, and C, for the above-average, the average and the below average groups. Another factor that could have contributed to the high *failure* rate in the Ordinary Grade in Indian schools was the fact that the curriculum was still too academic in nature. The subjects offered in the Advanced and Ordinary Grades were the same, except that they were offered at two different levels. Moreover, in Indian secondary schools the majority of the Indian candidates took Latin as the second language. The syllabus for Latin was a common syllabus for both the grades. Mathematics was also taken by the majority of Indian candidates. It is common knowledge that the *failure* rate in these subjects is quite high.

The high *failure* rate in the Ordinary Grade examination appears to be inconsistent with the principles of streaming, where each pupil was supposed to be given the opportunity of pursuing a course of study in accordance with his ability. It was this aspect that later received attention when the new system of differentiated education was introduced in 1973.

Percentages of pass and failure in the Standard VII Examination: 1967-1972

Key:

- A = Percentage of pass on the Advanced Grade
- B = Percentage of candidates who wrote on the Advanced Grade but passed on the Ordinary Grade.
- C = Percentage of Advanced Grade candidates who failed.
- D = Percentage of candidates who wrote on the Ordinary Grade and passed.





(ii) Under the New System of Differentiated Education

Under the new system of differentiated education, Standard VII marks the end of the Junior Secondary phase. The Standard VII Academic Course examination is a crucial examination. On the performance at this examination, a pupil may either be allowed to follow a chosen field of study in the Senior Secondary phase, leading to the Senior Certificate with or without Matriculation exemption, or be placed in the Practical Course, which at present goes up to the Standard VIII level. A pupil who is promoted into the Practical Course, may repeat the standard in order to pursue his study in the normal Academic Course. (4)

The results of the Standard VII interval examination are presented in Table 3.4.

TABLE 3.4

RESULTS OF THE ACADEMIC COURSE STANDARDS VII INTERNAL EXAMINATION UNDER THE NEW SYSTEM OF DIFFERENTIATED EDUCATION IN ALL INDIAN SCHOOLS IN THE REPUBLIC : 1973-1975

YEAR NUMBER WHO WROTE	PASSED				FAILED	
	ACADEMIC	%	PRACTICAL	%	NUMBER	%
1973 8 727	5 820	66,70	2 332	26,72	575	6,58
1974 8 879	5 802	65,34	2 453	28,64	624	7,02
1975 6 140	4 160	67,75	1 667	27,15	313	5,10
Totals 23 746	15 782		6 452		1 512	
Average 7 915	5 260	66,59	2 150	27,50	504	6,23

(Source: Promotion and Retardation Schedules of Division of Education - Department of Indian Affairs File 19/20/6/2)

When the pupils have reached the Standard VII Academic Course, they have come to the end of the Junior Secondary Course for the ordinary normal pupils. Now it must be remembered that these pupils have already gone through the sifting process twice - first, they were sifted and classified in the final Standard V examination; second, they went through the same process at the end of Standard VI year. Now, at the end of the Standard VII year a further sifting has taken place to classify the pupils.

With reference to Table 3.4, it will be observed that during the years 1973 to 1975, an average of only 66,59% of the already selected pupils in Standard VII Academic Course, actually passed their grade examination, while a fairly high percentage - an average of 27,50% failed to pass their grade and were transferred to the Practical Course Standard VIII. Some of the latter type of pupils perhaps decided to repeat the Standard VII Academic Course rather than follow the Standard VIII Practical Course.

In Table 3.5 the examination results of the entire Standard VII pupil population - both the Academic and Practical Course - are presented.

The data in Table 3.5 show that there were more pupils promoted into the Practical Course than into the Academic Course during the years 1973 to 1975. During these three years an average of 44,4% of the entire Standard VII school population in Indian schools passed into the Practical Course against an average of 42,7% who obtained an Academic Course pass. The average *failure* rate for Standard VII was 12,8%. The *failure* rate appears to be consistent during the three years, except in 1975 where there is a drop of approximately 1%.



During the three years, there appears to be a progressive drop in the rate of passes into the Academic Course and a corresponding increase in the rate of passes into the Practical Course.

TABLE 3.5

RESULTS OF THE STANDARD VII EXAMINATION UNDER THE NEW SYSTEM OF DIFFERENTIATED EDUCATION, ACADEMIC AND PRACTICAL COURSE COMBINED FOR ALL INDIAN SCHOOLS IN THE REPUBLIC : 1973 - 1975

YEAR	NUMBER WHO WROTE	PASSED				FAILED	
		ACADEMIC	%	PRACTICAL	%	NUMBER	%
1973	12 765	5 838	45,7	5 254	41,2	1 673	13,1
1974	13 641	5 812	42,6	6 004	44,0	1 825	13,4
1975	11 102	4 443	40,0	5 335	48,0	1 324	12,0
Totals	37 508	16 093		16 593		4 822	
Average	12 502	5 364	42,7	5 531	44,4	1 607	12,8

(Source : Promotion and Retardation Schedules - Division of Education - Department of Indian Affairs)

To compare the trend in the examination results between the Standard VI Academic Course and the Standard VII Academic Course let us look at Table 3.6.

The information in the Table below shows the percentage of pupils in the Academic Course who either passed into the Academic Course or into the Practical Course. The purpose of this table is to illustrate two points: firstly to show that the process of sifting still goes on after the pupils had been classified into the Academic and

Practical course at the end of Standard V; secondly to show that the practice of promoting a comparatively high percentage of Standard VII pupils into the Practical Course, immediately before the Senior Secondary phase, appears to be prevalent in the schools.

TABLE 3.6

TABLE SHOWING THE COMPARATIVE PASS AND FAILURE RATES OF PUPILS IN THE ACADEMIC COURSE IN STANDARDS VI AND VII

YEAR	PASSED				FAILED	
	ACADEMIC		PRACTICAL		STD VI	STD VII
	STD VI	STD VII	STD VI	STD VII		
1973	79,98%	66,70%	17,31%	26,72%	2,71%	6,58%
1974	77,69%	65,34%	18,37%	28,64%	3,94%	7,02%
1975	78,62%	67,75%	18,25%	27,15%	3,13%	5,10%
Average	78,76%	66,59%	17,97%	27,50%	3,26%	6,23%

(Source : Department of Indian Affairs, Division of Education - File 19/20/6/2.

In Standard VI an average of 78,7% of the pupils pass into the Academic Course against an average of 66,5% in Standard VII. Of the Academic Course pupils passing into the Practical Course, there appears to be a higher percentage in Standard VII than in Standard VI. For example in Standard VI the average percentage of pupils passing into the Practical Course is 17,9% against 27,5% in Standard VII. This suggests that the schools are adopting a more stringent method of sifting at the end of the Standard VII year.



According to the norms of the Department of Indian Affairs, there should be approximately 20% of the pupils in the Practical Course.<sup>(5)</sup> The Practical Course is designed for the dull normal pupils and according to Behr<sup>(6)</sup> the IQ range of the dull normal or what he terms as the dull-average is between 80 to 89 on the NSAGT. The normal distribution of the dull-average is about 16%. If we were to accept the incidence of dull-normal pupils to be in the region of 16%, then the high percentage of 44,4% of the pupils passing into the Practical Course in Standard VII suggests that either the incidence of dull-normal pupils in the Indian community is very much higher than in other groups, or there is something wrong in our examination system, or that the pupils are underachieving?

In a preliminary survey carried out by the Department of Indian Affairs on the question of above-average pupils in the Practical Course, it was found, for example that of the 750 pupils included in the survey, 124 pupils had an IQ, based on the Group Test for Indian South Africans, of between 96 and 115. The details are presented in the table below.

TABLE 3.7

DISTRIBUTION OF SAMPLE PUPILS WITH IQ SCORES (BASED ON THE GTISA OF BETWEEN 96 AND 115+ WHO AT THE END OF STANDARD V PASSED INTO THE PRACTICAL COURSE IN 1975

I.Q. Scores	96-99	100-103	104-107	108-111	112-115+
No. of Pupils	40	37	21	10	16
Percent	32,25	29,83	16,93	8,06	12,90

According to the findings, about 32,25% of the pupils with an IQ score of between 96 to 99 were placed in the Practical Course. More than two-thirds of the sample pupils who could be classified as above average ability were promoted into the Practical Course. The presence of pupils of average and above average ability in the Practical Course suggests that there is an urgent need for remedial measures in the schools.

### 3.2.3 Results of the Standard VIII Examination:

#### Under the New System of Differentiated Education

At the end of 1973 the Indian pupils wrote their examinations under the promotion requirements for the new system of differentiated education. In Table 3.8 the results of the internal Standard VIII Academic Course examination are set out.

TABLE 3.8

RESULTS OF THE ACADEMIC STANDARD VIII INTERNAL EXAMINATION  
IN ALL INDIAN SCHOOLS IN THE REPUBLIC : 1973-1975

YEAR	NO. WHO WROTE	PASSED				SCHOOL LEAVING		FAILED	
		ACADEMIC	%	PRACITCAL	%	NO.	%	NO.	%
1973	8 680	6 940	79,95	34	0,40	890	10,25	816	9,40
1974	6 317	5 298	83,87	-	-	-	-	1019	16,13
1975	7 284	6 134	84,21	-	-	-	-	1150	15,79
Total	22 281	18 372		34		890		2985	
Average %			82,5						13,8

(Source: Division of Education - Department of Indian Affairs  
Promotion and Retardation Schedules)



The results set out in Table 3.8 show that the pass rate in the Standard VIII Course has been improving progressively from 1973 to 1975 with an average pass rate of 82,5% for the three years. It would seem that the process of sifting in the previous standards has helped to attain a good pass rate in the Standard VIII examination. Apart from the process of sifting, the other important factor in the improved pass rate could also be due to the fact that in Standard VIII, the pupils have now embarked on a field of study to suit their individual interests and ability.

#### 3.2.4 Results of the Internal Standard IX Examination

##### (i) Under the Old System of Streaming

The Standard IX examination is a crucial examination and according to Van der Walt<sup>(8)</sup> sifting takes place with an eye on the Standard X examinations. Sometimes, the imminence of an external examination is heralded by a higher failure rate in the preceding year.<sup>(9)</sup> Van der Walt compared a group of Indian high schools with the best Standard X examination results with schools with the worst Standard IX examination results to illustrate how schools manipulate promotion rates. He found that schools with a high failure rate in the Standard IX examination, usually obtain better results in the Standard X examination and schools with the worst Standard X examination results usually have a low failure rate in Standard IX.

This practice of manipulating the pass rates in the year preceding an important external examination like the Senior Certificate or "Matric" examination is, perhaps, due to the great importance that is attached to the examination. The results of the schools' Senior Certificate examination are given much publicity and receive much attention as was shown in the opening chapter in this study. Standard

IX examination results do not come into public gaze but the Senior Certificate or "Matric" results do. So, some school principals, to maintain a good examination record, retard a fairly high percentage of their Standard IX pupils.

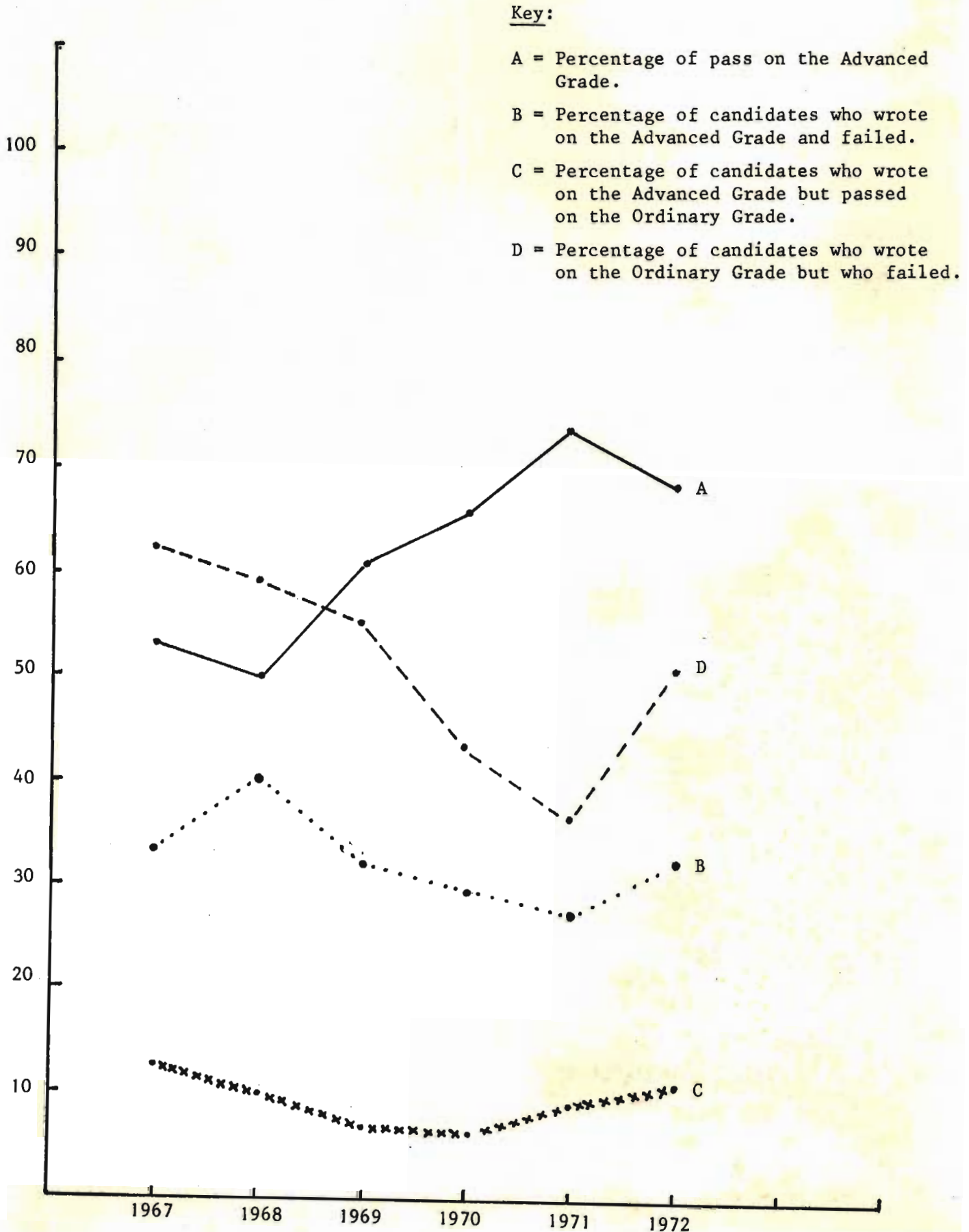
In Figure 3.3 the results of the internal Standard IX examination are presented.

From Figure 3.3 it will be seen that the failure rate in the Advanced Grade examination for the period 1967 to 1972, has been dropping steadily. At the same time the percentage of pupils who wrote on the Advanced Grade but who obtained a pass on the Ordinary Grade also dropped from about 13% in 1967 to about 6% in 1970 but rose slightly in the remaining years.

The percentage of failure in the Ordinary Grade examination for the years 1967 to 1970 appears to be quite high in comparison with the percentage of failures in the Advanced Grade. In 1967 - the first year of streaming in Indian schools - 167 pupils wrote the examination on the Ordinary Grade. Of these only 63 pupils passed and 104 pupils (or about 62% failed the Ordinary Grade examination. The rate of passes for the years 1968 to 1970, does not show much improvement. During these years an average of 52% of the Ordinary Grade pupils failed. In an investigation carried out by the Transvaal Education Department<sup>(10)</sup> in 1965 on failure in Standard IX, it was found that the percentage of failures in the school leaving course was twice that of the university entrance course. In the university entrance course, about 15% of the Standard IX pupils in their investigation failed, while 30,8% pupils failed in the school leaving course.



Results of the Internal Standard IX Examination: 1967-1972



(ii) Under the New System of Differentiated Education

The results of the internal Standard IX examination under the system of differentiated education are set out below.

TABLE 3.9

RESULTS OF THE ACADEMIC COURSE STANDARD IX EXAMINATION UNDER THE SYSTEM OF DIFFERENTIATED EDUCATION IN ALL INDIAN SCHOOLS IN THE REPUBLIC: 1973 - 1975

YEAR	NO. WROTE	NO. PASSED	%	NO. FAILED	%
1973	5 106	3 754	73,6	1 352	26,4
1974	6 102	4 393	71,9	1 709	28,1
1975	5 076	3 850	75,8	1 226	24,2
Average %			73,7		26,3

(Source : Department of Indian Affairs - Division of Education, Promotion & Retardation Schedules.)

The Standard IX results seemed to have reached some stability as compared with the fluctuating results under the old system of streaming (see Figure 3.3).

However, if the Standard VIII examination results under the new system of differentiated education (see Table 3.8) are compared with the results of the Standard IX examination as set out in Table 3.9, it will be noticed that the failure rate in Standard IX is twice that of the Standard VIII examination. Does this higher failure rate in Standard IX suggest that with the imminence of the Senior Certificate examination in the following year, schools are adopting a policy of sifting?



### 3.3 FAILURE AS REFLECTED IN THE EXTERNAL EXAMINATIONS

In respect of the external examinations, data obtained from the Natal Education Department and the Department of Indian Affairs will be presented.

The results of the following external examinations will be considered:

(i) The Standard VI Examination (Natal)

Under Natal Education Department this was an external examination until transfer of Indian education to the Department of Indian Affairs in 1966. Therefore the results of the Standard VI examination will be presented up to 1966.

(ii) The Standard VIII (Junior Certificate) Examination

The results of the Standard VIII examination which was under the control of the Natal Education Department up to 1965 will be presented first and then the results of the examinations under the control of the Department of Indian Affairs will follow.

(iii) The Senior Certificate Examination

The results of the Natal Senior Certificate examination which was under the control of the Natal Education Department from 1953 to 1971 will first be analysed and then the Senior Certificate examination results of the Department of Indian Affairs will be presented and discussed.

### 3.3.1 The Standard VI Examination results under Natal Education

#### Department

The Standard VI examination results were classified into two types of passes, namely, the Continuation Certificate pass and the School Leaving Certificate pass. The Continuation Certificate entitled a pupil to continue his formal education up to and including the Standard X level, while the School Leaving Certificate was issued to a pupil who had passed the Standard VI examination but which did not entitle him to continue beyond Standard VI. For such a pupil Standard VI marked the end of his formal schooling. Such a pupil could, however, repeat Standard VI in order to pass the Standard VI examination with a Continuation Certificate.

Coloured and Indian pupils wrote a common Standard VI examination. In Table 3.10 the results of the Standard VI examination for the Coloured and Indian pupils for the five years 1958 to 1962 are presented.

TABLE 3.10

RESULTS OF THE NATAL STANDARD VI EXAMINATION FOR COLOURED AND INDIAN PUPILS FOR THE YEARS 1958 TO 1962

	COLOURED PUPILS					INDIAN PUPILS				
	1958	1959	1960	1961	1962	1958	1959	1960	1961	1962
No. entered	684	740	873	1038	1217	5215	5599	6072	7191	7572
Pass: Con- tinuation	388	389	341	401	653	3689	3781	3285	4297	4993
Pass: Leav- ing	121	111	170	207	169	508	472	909	1122	889
No. Failed	175	240	362	430	395	1018	1346	1878	1772	1690
Percentage Failures	25,6	32,4	41,5	41,4	32,5	19,5	24,1	34,9	24,6	22,5

(Source : Reports of the Director of Education - Province of Natal: 1958 to 1962)

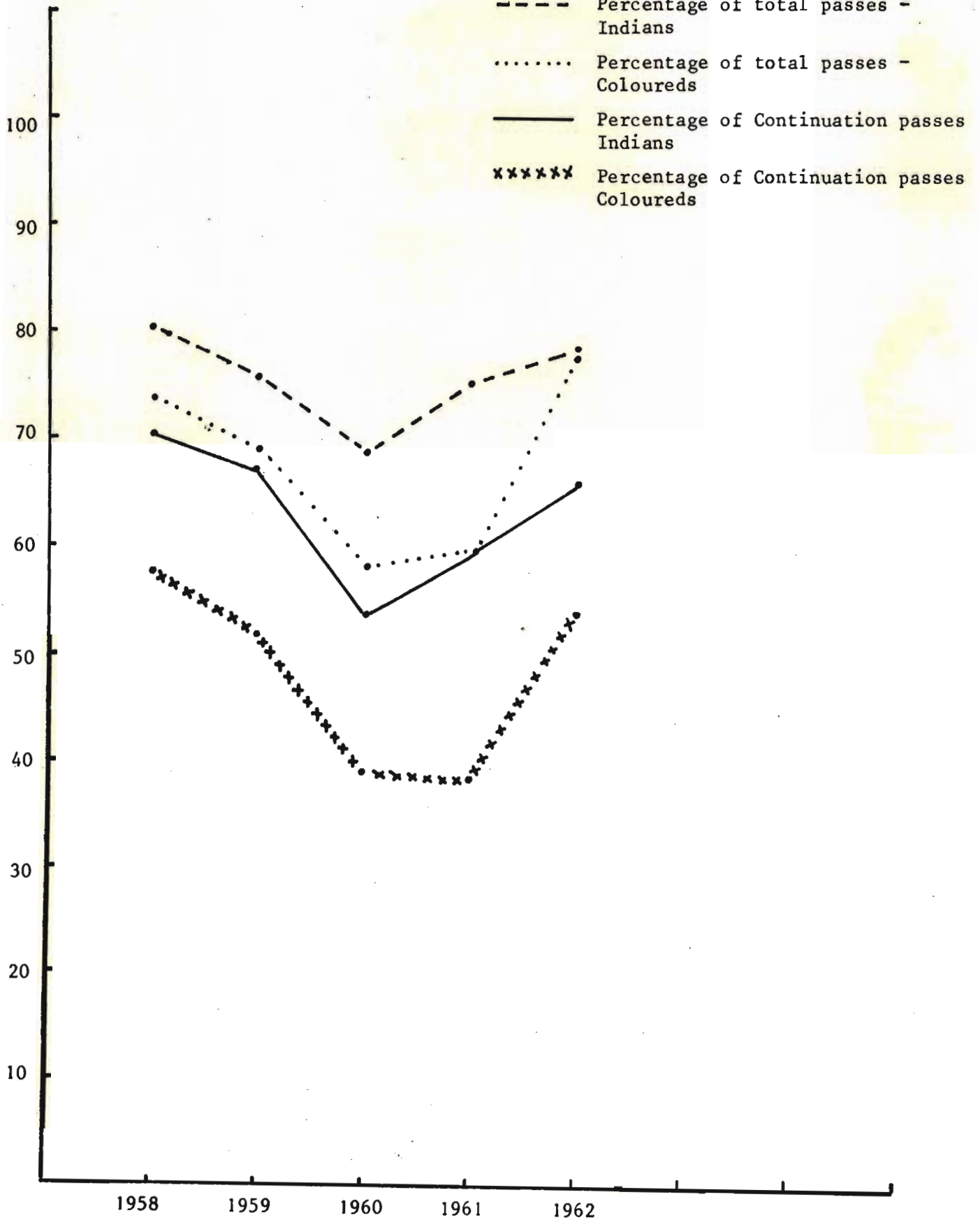


FIGURE 3.4

Results of the External Standard VI Examination: 1958-1962

Key:

- Percentage of total passes - Indians
- ..... Percentage of total passes - Coloureds
- Percentage of Continuation passes - Indians
- \*\*\*\*\* Percentage of Continuation passes - Coloureds



From Table 3.10 the following are noted:

the *failure* rate of the Indian pupils was on the average, much lower than that of the Coloured pupils. The average *failure* rate for the Indian pupils was 26,2% and for the Coloured pupils it was 34,7%.

The average percentage of Indian pupils who passed with a Continuation Certificate was 63% against 48% for Coloureds.

### 3.3.2 The Standard VIII (Junior Certificate) Examination Results

#### (i) Under the Natal Education Department.

The results of the Natal Junior Certificate examination for the period 1953 to 1962 are presented graphically in Figure 3.5. It must be pointed out that during this period there was neither streaming nor differentiation in the educational programme. The Indian secondary school curriculum was restricted to only a few subjects.

In Figure 3.5 it will be observed that the pass rate for the Indian candidates fluctuated between 50% and 60%. The results of the Coloured candidates show greater fluctuations than that of the Whites and Indians. Only in 1960 did the results of the White candidates drop close to that of the Indian candidates at 62%.

The poor results of the Indian candidates in the Natal Junior Certificate examination under the Natal Education Department could possibly be due to the narrow and restricted curriculum offered to the candidates. For example between 1962 and 1965 only the following subjects were offered to the Indian Junior Certificate candidates: English, Latin, Afrikaans, history, geography, arithmetic, mathematics, house-craft, biology, physical science and bookkeeping.



FIGURE 3.5

Results of the Natal Junior Certificate Examination:  
1953-1961

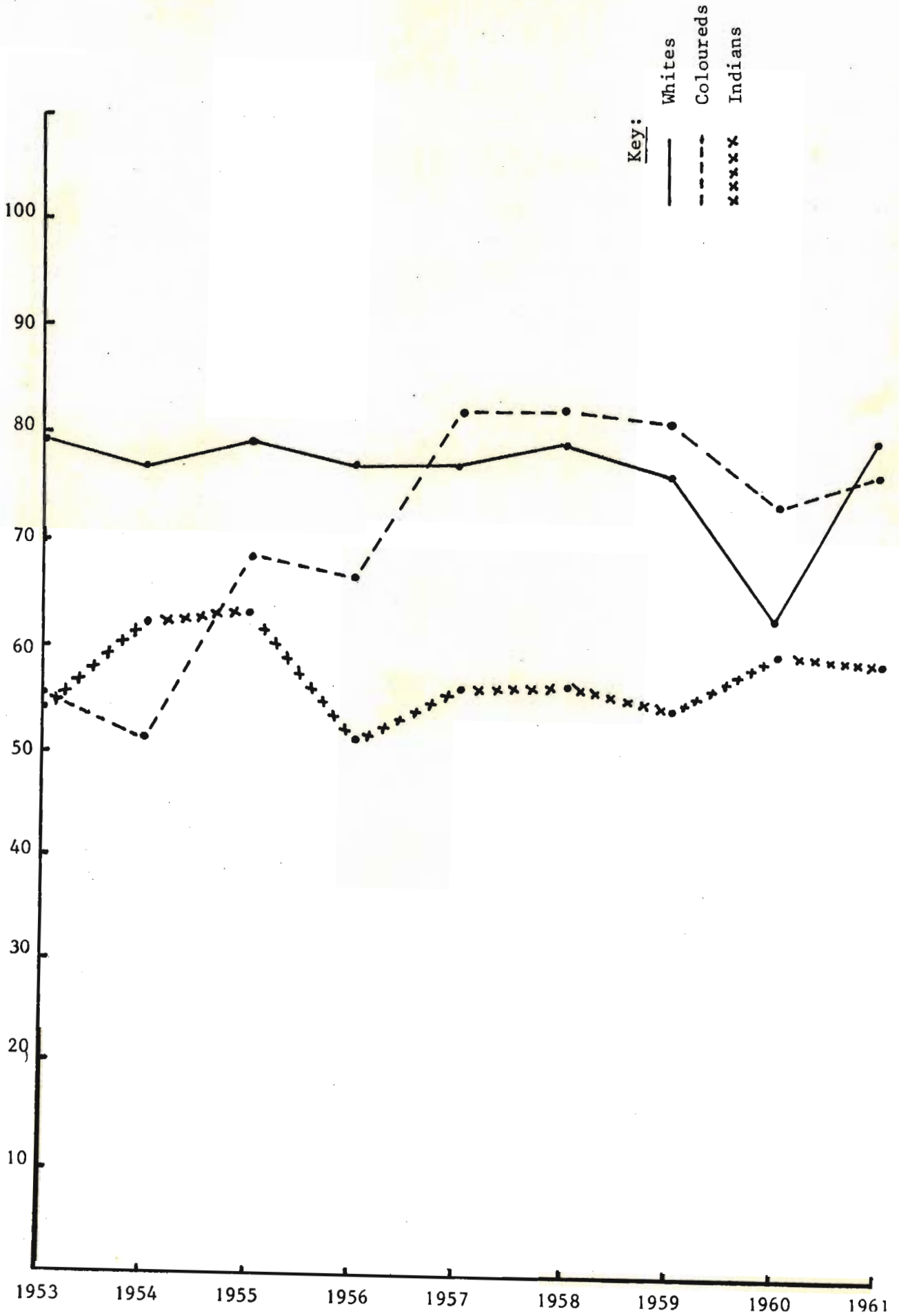


TABLE 3.11  
RESULTS OF THE JUNIOR CERTIFICATE EXAMINATION  
FOR WHITES, COLOURED AND INDIAN CANDIDATES  
1953 - 1962

	WHITES					COLOURED					INDIANS				
	No. entered	No. passed	%	No. failed	%	No. entered	No. passed	%	No. failed	%	No. entered	No. passed	%	No. failed	%
1953	2 009	1 595	79	414	21	132	72	55	60	45	1 053	577	54	476	46
1954	2 190	1 698	77	492	23	129	66	51	63	49	992	616	62	376	38
1955	2 315	1 831	79	484	21	149	102	68	47	32	951	598	63	353	37
1956	2 548	1 955	77	593	23	136	90	66	46	34	975	502	51	473	49
1957	2 691	2 073	77	618	23	138	113	82	25	18	1 188	665	56	523	44
1958	2 902	2 290	79	612	21	154	126	82	28	18	1 268	715	56	553	44
1959	3 253	2 460	76	793	24	156	126	81	30	19	1 369	737	54	632	46
1960	3 557	2 198	62	882	23	178	129	73	42	23	1 765	1 041	59	642	36
1961	4 215	3 368	79	895	21	200	152	76	48	24	2 131	1 229	58	902	42
1962	4 478	3 512	78	966	21	250	138	55	112	45	2 241	1 385	62	856	38
Average			78		22			68		32			58		42



During this period an average of 94% of the Indian pupils took Latin as their second language, and only about 6% took Afrikaans. An average of nearly 88% of the candidates took Mathematics. Fifty percent of the candidates failed to pass in Latin and nearly 47% of the candidates failed in mathematics during this period. <sup>(11)</sup>

(ii) Under the Department of Indian Affairs

In 1967 the Department of Indian Affairs introduced the system of streaming in the secondary schools. In that year the pupils already in Standard VIII were given the opportunity to opt for the Advanced Grade or the Ordinary Grade. In 1967 only 929 pupils out of a total of 4 104 Standard VIII pupils in Natal entered to write the Standard VIII examination on the Ordinary Grade. This represented only 12% of the total Standard VIII candidates. From 1968 onwards the pupils in Standard VIII were classified on the basis of their overall results when they were in Standard VI.

The results of the Standard VIII external examination under the system of streaming are presented in the accompanying Table 3.12.

The results shown in Table 3.12 appear to have improved slightly over the results prior to streaming as shown in Table 3.11. Prior to streaming the average *failure* rate during the period 1953 to 1962 was approximately 42%. After streaming the average *failure* rate during the period 1967 to 1971 was about 31%.

The percentage of Advanced Grade *failures* converted to Ordinary Grade passes was more or less consistent at about the 12% level, except in 1971 when it was 19%.

TABLE 3.12

RESULTS OF THE STANDARD VIII EXAMINATION OF THE DEPARTMENT  
OF INDIAN AFFAIRS: 1967-1971

ADVANCED GRADE	1967		1968		1969		1970		1971	
	No.	%	No.	%	No.	%	No.	%	No.	%
No. of entries	3 175		3 425		3 762		3 315		3 472	
No. of passes with merit	113	4	131	4	206	6	157	5	159	5
No. of passes Advanced Grade	1 548	49	1 600	47	1 956	52	1 829	50	2 012	58
No. of passes Ordinary Grade	335	10	419	12	465	12	379	11	673	19
No. of failures	1 180	37	1 275	37	1 135	30	1 107	33	628	18
ORDINARY GRADE										
No. of entries	929		1 552		2 405		2 732		2 955	
No. of passes	582	63	856	55	1 271	53	1 089	39	1 839	62
No. of failures	347	37	696	45	1 134	47	1 643	61	1 116	38

The *failure* rate in the Ordinary Grade appears to be much higher than that of the Advanced Grade. The *failure* rate in 1970 was 61% compared with the average *failure* rate of 45% for the period 1967 to 1971.

It would seem that the Ordinary Grade was either beyond the ability range of a bulk of the pupils or the demands of the examination were too stringent.

### 3.3.3 The Results of the Senior Certificate Examination

In this section the results of the Senior Certificate examination will be presented and discussed for the following periods:

- (a) 1953 to 1963: the period prior to the system of streaming in Natal schools;
- (b) 1965 to 1974: the period during which Senior Certificate candidates were subjected to the system of streaming;
- (c) 1975 to 1977: the period under the new system of differentiated education.

#### (i) The period prior to Streaming: 1953 to 1963

In 1953 the Natal Education Department introduced its own Natal Senior Certificate examination. Prior to this date the candidates from Natal wrote the Matriculation examination of the Joint Matriculation Board.

During this period Whites, Coloureds and Indian candidates from Natal wrote the common Natal Senior Certificate examination. There-



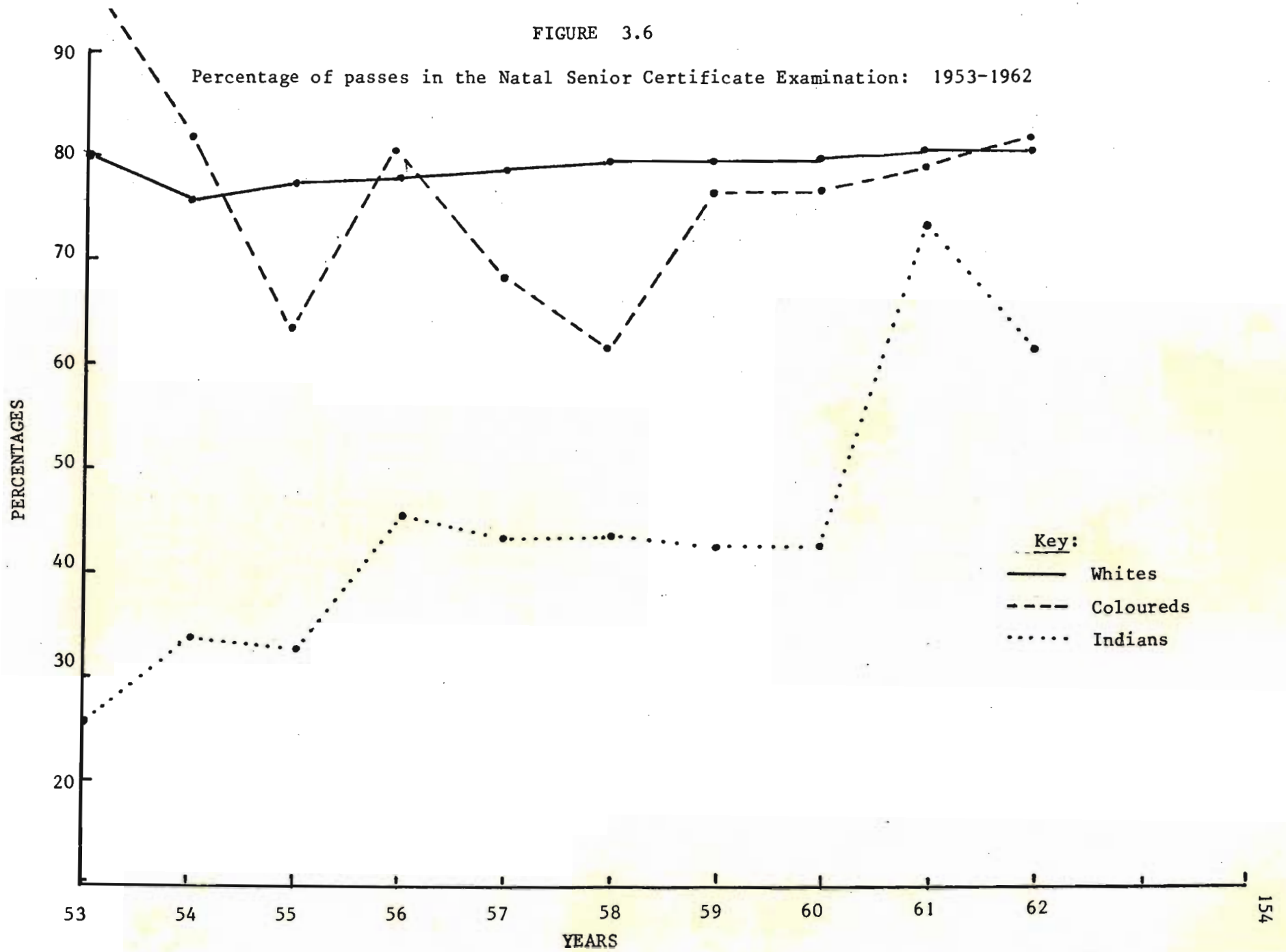
TABLE 3.13  
RESULTS OF THE NATAL SENIOR CERTIFICATE EXAMINATION  
FOR WHITES, COLOUREDS AND INDIANS  
1953-1962

Year	WHITES					COLOUREDS					INDIANS				
	No. Entered	No. Passed	%	No. Failed	%	No. Entered	No. Passed	%	No. Failed	%	No. Entered	No. Passed	%	No. Failed	%
1953	733	586	80	147	20	4	4	100	-		336	89	26	247	74
1954	757	572	76	185	24	28	23	82	5	18	296	100	34	196	66
1955	900	698	78	202	22	33	21	64	12	36	313	103	33	210	67
1956	1 020	801	79	219	21	32	26	81	6	19	459	212	46	247	54
1957	1 008	793	79	215	21	42	29	69	13	31	456	202	44	254	56
1958	1 132	905	80	227	20	47	29	62	18	38	457	202	44	255	56
1959	1 216	972	80	246	20	40	31	77	9	23	466	201	43	269	57
1960	1 456	1 157	80	299	20	50	37	74	13	26	530	315	59	224	41
1961	1 641	1 341	81	300	19	81	64	79	17	21	553	412	74	141	26
1962	1 865	1 507	81	358	19	60	49	82	11	18	660	399	62	243	38
Average			79		21			77		23			46		54

Source: Province / Natal: Reports of the Director of Education - 1953 - 1962

FIGURE 3.6

Percentage of passes in the Natal Senior Certificate Examination: 1953-1962



fore up to 1962, the results of the examination will be presented and discussed on a comparative basis.

As mentioned earlier, prior to the system of streaming, Indian candidates were offered a narrow and restricted curriculum. The subjects offered were mainly restricted to English, Latin, mathematics, history, geography and biology. Very few Indian secondary schools were in a position to offer Afrikaans. As a result the majority of Indian candidates were handicapped in the choice of a second official language.

The results of the Natal Senior Certificate examination are presented in the accompanying table and graph.

With reference to Table 3.13 and Figure 3.6 it will be seen that in the first Natal Senior Certificate examination held in 1953, 74% of the Indian candidates failed against 20% *failures* among the White candidates. The *failure* rate for Indian candidates is quite high considering the fact that out of a total school population of 66 356 in that year, only 336 candidates wrote the Natal Senior Certificate examination. It must be remembered that during this time, there was a high premium for admission to secondary schools because of limited secondary school accommodation. Pupils reaching the Senior Certificate stage were a select and perhaps a highly motivated group.

In the first ten-year period there appears to be much fluctuation in the results of the Indian and Coloured candidates whilst the results of the White candidates appear to be more or less stable. The Indian pass rate fluctuated from 26% in 1953 to 74% in 1961. Although the pass rate for Coloureds appears to be better than those



of the Indian candidates, there is greater fluctuations in the Coloured results than the Indian results. In 1953, only 4 Coloured candidates wrote the Natal Senior Certificate examination and all four passed. Between the years 1955 and 1958 the Coloured pass rate shows an erratic tendency. However, from 1959 onwards, the results reached some stability.

According to Malherbe<sup>(12)</sup>, the factor that one would expect to have the biggest influence on the percentage of passes in the examination from one year to the next would be a variation in the requirements laid down by the examining body. For example, changes in the compulsory grouping of subjects, in subject syllabuses and the marks required for passes in particular subjects as well as in the aggregate of the examination as a whole.

As there was hardly any significant change in the pass requirements for the Natal Senior Certificate examination during 1953 to 1963, the reasons for the high *failure* rates obtained by Indian candidates, therefore, cannot be entirely due to the minimum pass requirements. This then suggests that there may be other reasons for the high *failure* rate among the Indian candidates. Among other reasons, there could be the problem of the narrow and restricted curriculum offered to the Indian candidates compounded by the absence of differentiation in the educational system. There was also the problem of a shortage of adequately qualified teachers to handle the senior classes.

(ii) Results of the Natal Senior Certificate Examination under the System of Streaming into the Advanced and Ordinary Grades: 1965 to 1974

As mentioned in the previous chapter, the Natal Education Department

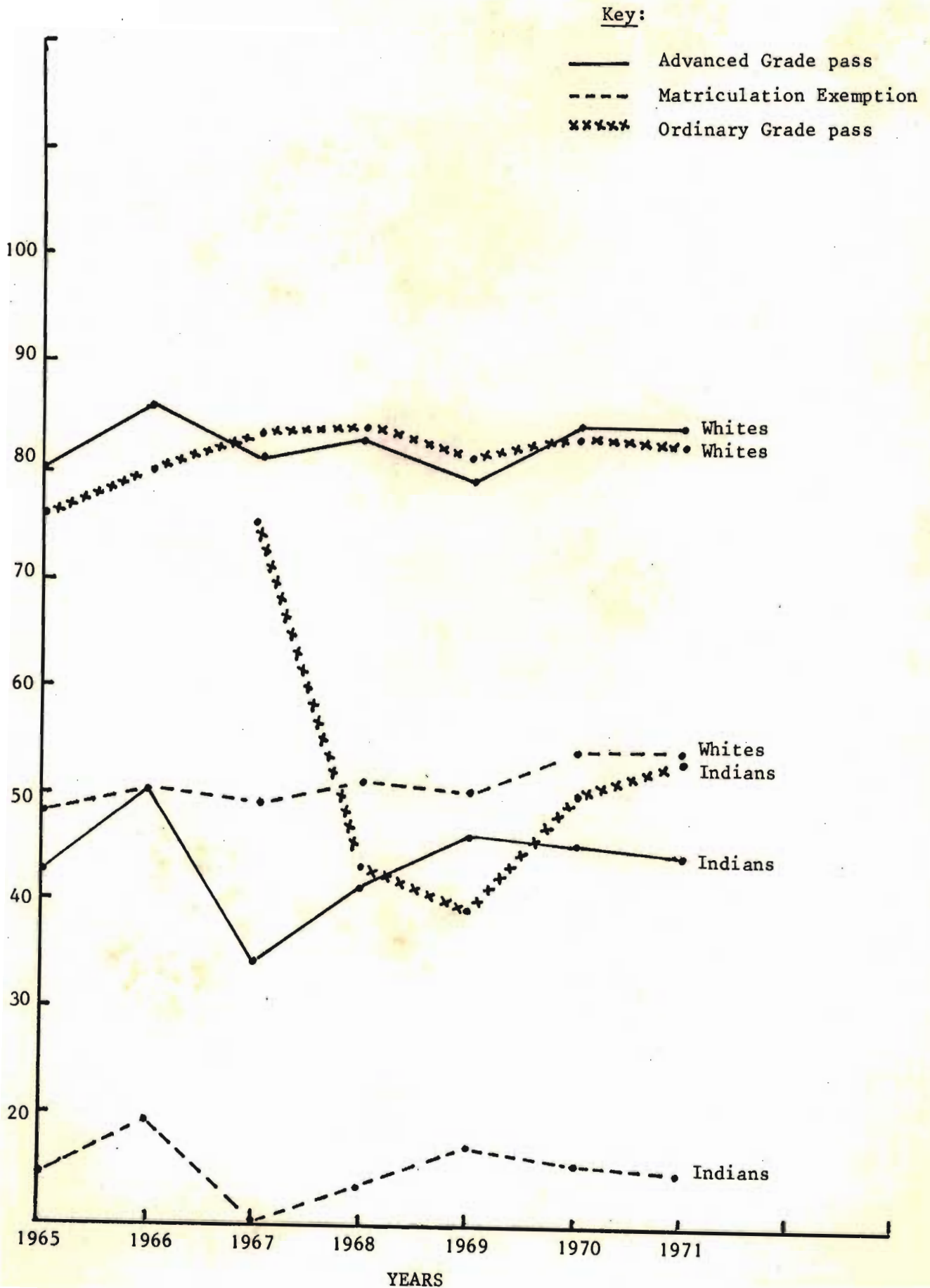
introduced the system of streaming into the Advanced Grade and the Ordinary Grade in the White schools in 1962. The first group of White candidates under the system of streaming sat for the Natal Senior Certificate examination in the Advanced and Ordinary Grades at the end of 1965. Indian and Coloured Senior Certificate candidates, in the absence of streaming, wrote the Natal Senior Certificate examination on only one grade - i.e. the Advanced Grade. This practice continued until Indian and Coloured education was transferred to the Departments of Indian and Coloured Affairs respectively.

In 1967 the Department of Indian Affairs introduced the Natal system of streaming in its schools. Although streaming into the Advanced and Ordinary Grade began in Standard VII, all pupils who were in Standards VIII to X in 1967, were given the opportunity of voluntarily following either the Advanced or the Ordinary Grade.

However, very few Indian candidates, especially in Standard X opted to write the Natal Senior Certificate examination on the Ordinary Grade. For example, only 16 candidates wrote the Natal Senior Certificate examination on the Ordinary Grade in 1967.

With reference to Figure 3.7 and Tables 3.14 and 3.15 it will be noticed that in the Natal Senior Certificate Advanced Grade examination, the overall pass rate in respect of the White candidates shows only slight fluctuations between 80% to 85%, whereas, the overall pass rate in respect of the Indian candidates shows extreme fluctuations. In 1965, the pass rate was 42% then it rose to 50% in the

Percentage of passes in the Natal Senior Certificate Examination  
1965-1971: Whites and Indians in Natal Schools.





following year and then plunged to 34% in 1967, and then began to rise in 1968 and 1969 to reach a measure of stability after 1969.

The percentage of Indian candidates passing with Matriculation exemption also shows extreme fluctuations. In 1967 only 10% of the Indian candidates obtained Matriculation exemption against 50% obtained by the White candidates in the same year.

The results of the Ordinary Grade examination in respect of the Indian candidates also show extreme fluctuations as compared with the results of the White candidates.

Although the number of Indian candidates who wrote the Natal Senior Certificate examination on the Ordinary Grade increased from the years 1968 to 1970, the percentage of passes in this grade was disappointingly low. One of the possible reasons for the high failure rate in the Ordinary Grade examination was that nearly all the Indian candidates took mathematics and Latin. The syllabus for Latin was common to both the Advanced Grade and the Ordinary Grade. A common examination paper was set for both the grades. For example, 77,7% of the Indian candidates failed in Latin in the Ordinary Grade in 1968 and 42,2% failed in mathematics in the same examination. (13)

In 1971, Natal Indian candidates wrote the Natal Senior Certificate examination under the rules of the Natal Education Department for the last time. As from the November/December examination of 1972, all Indian candidates wrote the Senior Certificate Examination under the rules of the Department of Indian Affairs. As stated in the previous chapter, from 1972 to 1974, the Department of Indian

TABLE 3.14

RESULTS OF THE NATAL SENIOR CERTIFICATE EXAMINATIONFOR WHITES AND INDIANSADVANCED GRADE : - 1965- 1971

Year	WHITES							INDIANS						
	No. Entered		Passed		Failed		No. Entered		Passed		Failed			
	Advanced	% Ordinary	%	No.	%	Advanced	% Ordinary	%	No.	%				
1965	2 594	1 870	73	193	7	531	20	1 328	399	30	163	12	766	58
1966	2 478	1 931	78	168	7	379	15	1 551	562	37	204	13	785	50
1967	2 572	2 067	81	231	9	274	10	1 631	541	34	196	12	894	54
1968	2 664	2 198	83	197	7	269	10	1 862	770	41	244	13	848	46
1969	2 607	2 064	79	228	9	315	12	1 442	660	46	193	13	589	41
1970	2 971	2 503	84	169	6	299	10	1 523	691	45	171	11	661	44
1971	2 971	2 509	84	181	6	281	10	1 948	859	44	176	9	913	47
Average %			80		7		13			40		11		49

(Source: Province of Natal: Reports of the Director of Education 1965 - 1971)

TABLE 3.15  
RESULTS OF THE NATAL SENIOR CERTIFICATE EXAMINATION  
FOR WHITES AND INDIANS IN NATAL  
ORDINARY GRADE : 1966-1971

Year	WHITES					INDIANS				
	No. Entered	No. Passed	%	No. Failed	%	No. Entered	No. Passed	%	No. Failed	%
1966	923	745	80	178	20	-	-	-	-	-
1967	933	773	83	160	17	16	12	75	4	25
1968	1 105	933	84	172	16	253	110	43	143	57
1969	1 133	918	81	215	19	378	149	39	229	61
1970	1 203	1 004	83	199	17	515	255	50	260	50
1971	1 204	998	82	206	17	874	465	53	409	47
Average %			82		18			52		48

(Source: Province of Natal: Reports of the Director of Education  
For the Years 1966-1971)



Affairs purchased the Senior Certificate examination papers from the Natal Education Department, but the Department of Indian Affairs was allowed to appoint its own sub-examiners from the ranks of the Indian teaching personnel. Certification was done by the Department of Indian Affairs.

The results of the Senior Certificate examination held under the rules of the Department of Indian Affairs, are analysed in detail in the accompanying table. As the results of the 1972 Senior Certificate examination do not show much difference from the 1971 results, only the results of the last two years (1973 and 1974) under the old system of streaming are presented.

The results set out in Table 3.16 show a marked improvement in the percentage of candidates passing on the Advanced Grade. From an average of 44% pass rate on the Advanced Grade in the previous three years, the average for 1973 and 1974 increased to about 57%. The percentage of candidates passing with Matriculation exemption has also improved significantly. In the previous three years the average percentage of Indian candidates passing with Matriculation exemption was 16%. This percentage increased to an average of about 24% in 1973 and 1974. There was an improvement in the percentage of Indian candidates passing with merit. For the previous three years, the average percent of merit passes was 2%, whereas, in 1973 and 1974 the average percentage of merit passes rose to 3,4%.

#### 3.3.3.1 Failure According to Subjects

In Table 3.17, *failure* according to subjects is detailed. The percentage of *failure* in a particular subject was determined by the number of candidates obtaining symbol FF (which is between 30 and 33%)

and below, expressed as a percentage of the total number of candidates who wrote that particular subject.

TABLE 3.16

TABLE SHOWING THE NUMBER OF INDIAN CANDIDATES WHO WROTE THE SENIOR CERTIFICATE ADVANCED GRADE EXAMINATION, WHO PASSED THE EXAMINATION, WHO OFFERED RECOGNISED SUBJECTS FOR EXEMPTION, WHO QUALIFIED FOR EXEMPTION AND THE PERCENTAGE WHO QUALIFIED FOR EXEMPTION - FOR THE REPUBLIC

	1973	1974
No. of Candidates who took whole examination	2 159	2 222
No. of passes: Advanced Grade	1 276	1 227
Ordinary Grade	246	260
Percentage of Passes: Advanced Grade	59,10	55,20
Ordinary Grade	11,39	11,70
Percentage of merit Passes	3,56	3,73
Percentage of passes	68,8	66,2
Percentage of Failures	31,12	33,08
No. of Candidates who took recognised subjects for Exemptions from Matriculation	2 107	2 177
No. who qualified for Exemption	507	539
Percentage of Candidates who took whole examination and who qualified for Exemption	24,06	24,76
Percentage of Candidates who took subjects for Exemption and qualified for Exemption	22,22	46,80

(Source : Division of Education - Department of Indian Affairs -  
File 19/46/4/3)



TABLE 3.17

PERCENTAGE OF INDIAN CANDIDATES WHO FAILED IN THE VARIOUS  
SUBJECTS IN THE SENIOR CERTIFICATE EXAMINATION ADVANCED

GRADE: 1972 - 1974

SUBJECT	1972		1973		1974	
	% Failed FF	M	% Failed FF	M	% Failed FF	M
English Higher	18,44	41	9,44	43	7,03	44
Afrikaans Lower	28,96	39	22,14	39	16,89	42
Latin	49,03	32	37,41	36	57,4	31
Mathematics	35,68	39	34,39	41	42,37	41
Biology	29,22	40	19,98	40	32,1	38
Physical Science	11,55	46	16,22	46	13,36	46
Geography	33,61	39	20,28	43	39,53	37
Domestic Science	20,54	41	8,75	43	6,51	47
History	9,75	50	15,04	49	16,75	49
Accountancy	14,78	47	9,62	49	6,39	50
Typing	-	68	-	62	7,41	48

Note: (i) FF = 30 - 33½%

(ii) M = Median percent

(Source - Department of Indian Affairs - Division of Education -  
File 19/20/2)

From Table 3.17 the following picture emerges:

The percentage of *failure* in English Higher shows a steady drop over the three years. The medium mark also increased during the same period.

The position of Afrikaans has also improved during the three years, although the median percentage has not improved much.

The performance in Latin appears to be with a high failure rate of 49,03% in 1972, 37,4% in 1973 and rising to 57,4% in 1974. The



median percentage is below the minimum pass requirement of 33 $\frac{1}{3}$ % in a subject for 1972 and 1974.

Apart from Latin, mathematics shows a high percentage of failure in comparison with other subjects. Geography is a close third.

### 3.3.3.2 Ratio of Boys and Girls failing in subjects

In order to determine the *failure ratio* between boys and girls in the subjects failed, an analysis was made of all candidates who wrote the whole Senior Certificate examination on the Advanced Grade and failed the examination in 1972 to 1974. The analysis excludes those candidates who passed but who failed in not more than one subject. Nor are the results of those candidates who were either wholly or partially absent for the examination included in the analysis. There were some candidates, who had written the Senior Certificate examination on the Ordinary Grade at a previous sitting. These candidates who passed the Ordinary Grade and who satisfied certain minimum requirements were allowed to write a few subjects on the Advanced Grade in order to obtain Matriculation exemption. Such candidates were also excluded from the analysis.

In the Senior Certificate examination a candidate has to pass a minimum of five subjects and pass the minimum aggregate. It is possible to pass all the six subjects by just obtaining the minimum of 33 $\frac{1}{3}$ % in each subject and yet fail the whole examination by failing to obtain the required aggregate. For example a candidate could obtain the minimum of 33 $\frac{1}{3}$ % in each subject and this would give him an aggregate of 632 marks. But in order to pass he requires 760 marks which is 40% of the total marks.

The analysis in respect of the Advanced Grade subject *failure* among male and female candidates is set out in Table 11.0.10

TABLE 3.18

RATIO OF BOYS AND GIRLS FAILING IN THE VARIOUS  
SUBJECTS IN THE SENIOR CERTIFICATE EXAMINATIONS  
OF 1972-1974 IN RESPECT OF INDIAN MALE AND FE-  
MALE CANDIDATES : ADVANCED GRADE

SUBJECT	Percentage of Failures				Percentage of Failures				Percentage of Failures			
	1972				1973				1974			
	M No.	%	F No.	%	M No.	%	F No.	%	M No.	%	F No.	%
English	209	67,9	99	32,1	131	73	49	27	114	73	42	27
Afrikaans	134	62	82	38	141	64	80	26	165	69	75	31
Latin	163	63	97	37	45	66	23	34	26	70	11	30
Biology	158	54	133	46	135	54	116	46	255	57	193	43
Physical Science	18	67	9	33	27	50	27	50	46	64	26	26
Mathematics	224	55	187	45	210	56	163	44	259	56	206	44
History	33	70	14	30	34	47	38	53	33	52	31	48
Geography	245	56	193	44	137	59	96	41	239	57	180	43
Accountancy	54	42	74	58	66	59	45	41	51	49	54	51
Commerce	-	-	-	-	-	-	-	-	6	86	1	14
Typing	-	-	-	-	-	-	-	-	2	33	4	67
Housecraft	-	-	-	-	-	-	-	-	-	-	11	-

M = Male

F = Female

Note: The figures for 1972 are for Natal candidates only, 1973 and 1974 figures are for the Republic.  
 (Source: Department of Indian Affairs - Division of Education - Examination Schedules.)

With reference to Table 3.18 it is observed that in almost all subjects except in accountancy, the girls perform better than the boys. There are fewer girls failing in the various subjects.

In a study carried out in the Swedish secondary schools in 1953<sup>(14)</sup> it was found that the overall percentage of failure is much higher among boys than girls. But it would be rash to conclude that the girls are superior to the boys simply on the figures shown in the analysis. The actual number of girls is approximately half that of the number of boys and therefore it is quite likely that the girls' group represents a better selection.

(iii) Results of the Senior Certificate Examination:

Under the New System of Differentiated Education

At the end of 1975, Indian candidates wrote the first Senior Certificate Examination under the requirements of the new system of differentiated education. A glance at the results of the new Senior Certificate examination held in 1975 and 1976 as set out in Table 3.19 shows that the pass rate in these two examinations have improved considerably compared with the results of the two years immediately prior to the introduction of the new education programme. In 1973 and 1974 the percentage of passes in the Senior Certificate examination was 68,8% and 66,12% respectively. In the 1975 and 1976 examinations the percentage of passes was 85,0% and 86,4% respectively.

However, the percentage of candidates who obtained Matriculation exemption in these two years had not shown any appreciable increase. In the 1975 and 1976 Senior Certificate examinations, candidates aiming for the Matriculation exemption could have possibly been affected by the restrictions by the Joint Matriculation Board in re-



spect of subject grouping. For example, accountancy taken on the Higher Grade was not accepted as one of the three Higher Grade subjects for Matriculation exemption, except for those candidates following a commercial field of study. Another restriction was that in order to obtain a Matriculation exemption, a candidate had to pass at least five subjects from each of four different groups. These restrictions were removed in 1976 and in 1977. The schools were informed on 6 August 1976 that the Joint Matriculation Board would recognise accountancy on the Higher Grade as one of the three compulsory Higher Grade subjects, provided it remains a Group F subject, and that a pass in accountancy on the Higher Grade will only be recognised as one of the three Higher Grade subjects for Matriculation exemption if, mathematics at least on the Standard Grade is also passed. In June 1977 the Department of Indian Affairs informed its schools of another amendment by the Joint Matriculation Board, namely, that candidates for Matriculation exemption could either pass in at least five subjects from each of four different groups *or two subjects from Group C or Group E and one subject from each of two other groups.* (15)

These amendments were announced to schools long after the candidates had already embarked on their course of study. The full effects of these amendments could only be felt in the Senior Certificate examination of 1977 and thereafter.

In Table 3.20 details of the percentage of pupils passing and failing in individual subjects in the Senior Certificate examinations is analysed. It will be noticed that the pass rate of individual subjects in the 1975 Senior Certificate examination is much better than

the results of the 1976 examination. In almost all the subjects taken on the Higher Grade in 1976, the percentage of passes is lower than the passes in the 1975 examination. For example the pass rate in individual subjects taken on the Higher Grade in 1976 shows a decrease of between 15% and 20% from that of the 1975 examination. Subjects in which this big decrease occurred are: English first language, Latin, mathematics, physical science, biology, history, geography, economics and home economics. On the other hand there is no great difference in the pass rate in individual subjects taken on the Standard Grade during the two years.

TABLE 3.19

RESULTS OF THE 1975 AND 1976 SENIOR CERTIFICATE EXAMINATION  
WRITTEN UNDER THE REQUIREMENTS OF THE NEW SYSTEM OF DIFFERENTIATED EDUCATION IN RESPECT OF ALL INDIAN CANDIDATES IN THE  
REPUBLIC

	1975		1976	
	No.	%	No.	%
No. of full-time candidates	4 327	-	4 198	-
No. of Senior Certificate passes	2 669	61,7	2 520	60,2
No. of Matriculation Exemptions	1 010	23,3	1 101	24,0
Total of Senior Certificate and Matriculation passes	3 679	85,0	3 630	86,4
No of candidates who took subjects to qualify for Matriculation exemption	1 828	42,2	2 577	61,3
No. who took Matriculation exemption subjects and obtained exemption	1 010	55,5	1 101	42,7
No. of failures	648	15,0	568	13,6

The possible explanation for the difference in the pass rate in the subjects taken on the Higher Grade could be that in 1976 more pupils were allowed to enter for subjects on the Higher Grade than in 1975. In the 1975 examination it will be noticed that a comparatively smaller percentage of subjects failed in the Higher Grade was converted to a pass on the Standard Grade than was the case in 1976. For example in 1975, only 2,7% of the candidates who failed English on the Higher Grade had their failure converted to Standard Grade pass, against 22,4% in 1976. The conversion of Higher Grade failure into Standard Grade pass in 1976 was about twice that of 1975 in such subjects as physical science, biology, geography and economics.

The overall results in the two Senior Certificate examinations written under the requirements of the new system of differentiated education appears to have improved to a great extent.

The improvements in the results of the Senior Certificate examination under the new system of differentiated education, could be due to several factors. Firstly, it could be due to the principle of differentiation, whereby the educational programme sets out to provide for the individual interests, ability and aptitude. There is also the school guidance service which could have contributed in some small measure in advising pupils on the selection of the study direction. Secondly, with the introduction of differentiated education in Indian schools, the syllabi in the various subjects were restructured with emphasis on style and content. Loosely stated aims have been replaced by achievable and measureable objectives. (16)

Teacher education programme has also been restructured to prepare teachers to meet the demands of a new educational programme. Super-



TABLE 3.20

PERCENTAGE OF PASS AND FAILURE IN INDIVIDUAL SUBJECTS IN THE  
SENIOR CERTIFICATE EXAMINATION UNDER THE NEW DIFFERENTIATED EDUCA-  
TION IN RESPECT OF THE TOTAL INDIAN CANDIDATES IN THE REPUBLIC

	1975					1976				
	Entered on Higher and passed on Higher	Entered on Higher and passed on Standard	Entered on Higher and failed	Entered on Standard and passed	Entered on Standard and failed	Entered on Higher and passed	Entered on Higher and passed on Higher	Entered on Higher and failed on Standard	Entered on Standard and passed	Entered on Standard and failed
	%	%	%	%	%	%	%	%	%	%
English 1st Language	96,7	2,7	0,6	98	2	76,9	22,4	0,7	98	2
Afrikaans 2nd Language	80,8	9,4	9,8	77	23	86,6	7,1	6,3	88	12
Mathematics	75,8	16,5	7,7	77	23	59,6	25,4	15,0	68	32
Physical Science	84,1	13,5	2,4	81	19	67,4	28,1	4,5	81	19
Biology	63,6	24,9	11,5	78	22	43,3	47,5	9,2	90	10
Latin	97	-	3	-	-	80,0	15,5	4,5	-	-
History	81,6	10,6	7,8	81	19	61,0	30,6	8,4	81	19
Geography	77,4	17,6	5,0	78	22	55,4	38,8	5,8	80	20
Economics	81,4	11,5	7,1	63	37	59,8	37,0	3,2	81	19
Accountancy	94,9	4,5	0,6	93	7	84,7	13,1	2,2	93	7
Home Economics	100	-	-	100	-	80	-	20	100	-
Technical Drawing	61,7	29,4	8,9	30	70	88,8	-	11,2	93	7
Woodwork	-	-	-	100	-	-	-	-	96	4
Metalwork	-	-	-	100	-	-	-	-	96	4
Needlework & Clothing	-	-	-	100	-	-	-	-	96	4
Housecraft	-	-	-	94	6	-	-	-	94	6
Typing	-	-	-	95	5	-	-	-	94	6
Business Economics	-	-	-	91	9	-	-	-	90	10

NOTE: The above details are in respect of the most common subjects taken by candidates. The Table excludes certain technical subjects.

(Source: Department of Indian Affairs. Division of Education File No. 19/20/2)

vision of instruction in the schools is now based on a functional basis where the Academic Inspectors of Education are appointed on a subject-specialist basis and the Circuit Inspectors are appointed to supervise general school organisation. All these factors could have contributed to the improvements in the examinations.

#### 3.4 AN OVERVIEW

In the preceding sections of this chapter, data on the incidence of success and failure in Indian secondary education were presented. Comparative figures were also given for the White, Coloured and Indian Candidates when these three groups wrote common Junior and Senior Certificate examinations under the Natal Education Department. In other cases, the results of White and Indian candidates, especially in the Natal Senior Certificate Examination, were given. From these comparative data it would seem that the White candidates did very much better in the examinations than the Coloured and Indian candidates. For example, we noticed in Figure 3.6 that during the ten year period between 1953 and 1962 the pass rate of the White candidates in the Natal Senior Certificate examination was an average of 80% while the Indian pass rate was an average of 45% during the same period. Only in 1961 and 1962 did the pass rate of the Indian candidates reach the 60% level.

There is a big difference between the pass rates of White and Indian candidates. While there may be several reasons for this big difference in the pass rates between Whites and Indians, it is not the intention here to discuss all of them. However, some of the differences in the pass rates could possibly be accounted for by the obvious differences in the curriculum provided in the White and Indian schools;



the absence of streaming in Indian schools, and presumably the non-application of statistical adjustments of raw examination marks in respect of the Indian candidates.

#### 3.4.1 Prior to streaming in Indian Schools

It has been often mentioned in this study, that Indian pupils in secondary schools had to contend with a narrow and restricted curriculum for many decades. Furthermore, there was no consideration given to the individual needs, aptitudes, ability and interests. Every child, regardless of his interest and ability was given the "straight six" academic type of education. All secondary pupils in Indian schools had no choice but to take mathematics, Latin, history and geography. It made little difference whether a pupil liked such subjects as Latin and mathematics. The education system decided for the pupil that Latin and mathematics were good for him. As the number and variety of secondary pupils increased, the "straight six" course, namely English, Latin, history, geography, biology and mathematics, prescribed for Matriculation did not suit all the pupils. These subjects were all that the schools offered at the time and the pupils had no option but to take them whether they went to the University or not. However, in the early sixties physical science and bookkeeping were introduced, thus allowing a small measure of choice as pupils were allowed to offer bookkeeping in place of history.

Although the need for differentiation in the education of pupils of widely varying abilities in the same class had long been recognised, in Natal Indian secondary schools, a system of differentiation



based on streaming into the Advanced and Ordinary Grade was only introduced in 1967. The high *failure* rate in Indian secondary education prior to the introduction of differentiation could partially be attributed to the fact that, pupils who were not destined for university education, were obliged to take the kind of subjects on an academic level designed for the selection of pupils entering university. The problem was further aggravated by a lack of differentiation in the subject content and in the methods of teaching an ever increasing number of Indian secondary pupils of increasingly varying abilities and aptitudes.

#### 3.4.2 The period during the system of Streaming in White Schools in Natal

It was stated earlier, that in 1946 the Wilks Committee recommended a system of differentiated education for Natal schools. The committee also recommended that any system of education for the Coloureds and Indians should not differ fundamentally from those of Whites.<sup>(17)</sup> However, when in 1962 the Natal Education Department eventually introduced a system of streaming in White schools, it ignored the Wilks Committee recommendation that the education of the Coloureds and Indians should not differ in any fundamental way from that of the Whites, by excluding the Coloured and Indian schools from the system of streaming. Consequently, the Coloured and Indian pupils were deprived of the benefits that were expected to flow from the system of streaming into the Advanced and Ordinary Grades.

The results of the Junior Certificate examination prior to streaming show that the *failure* rate among Indian candidates for the period 1953 to 1962 (see Table 3.11) was an average of 42% against 32% and 22% for the Coloured and White pupils respectively.

The poor results attained by the Indian candidates in the Junior Certificate examination during this period could be due to the fact that more and more pupils of increasingly varying ability range were attempting a course of study which was mainly academic in nature. This position was further aggravated by the narrow and restricted school curriculum offered at the time.

In 1965 the Natal Senior Certificate examination was set on two separate levels - the Advanced Grade and the Ordinary Grade. Only White candidates wrote on either the Advanced Grade or on the Ordinary Grade. Coloured and Indian candidates had no option but to write on the Advanced Grade. The Advanced Grade course was designed to suit the needs of candidates wishing to enter university after obtaining Matriculation exemption. Thus all Coloured and Indian candidates, regardless of their abilities, had to write a course which was designed for university entrance.

The effects of this situation are graphically illustrated in Figure 3.7. In 1965 only 42% of the Indian candidates passed against 80% White candidates. From 1965 to 1971 the average percentage of passes among White candidates fluctuated only slightly between 79% and 86%, whereas the Indian candidates' results fluctuated between 34% and 50% during the same period. The percentage of White candidates obtaining Matriculation exemption between 1965 and 1971 also was very much higher than those obtained by the Indian candidates. In 1967, only 10% of the Indian candidates obtained Matriculation exemption, whereas 81% of the White candidates obtained Matriculation exemption. The average percentage of Indian candidates who obtained Matriculation exemption during the period 1965 to 1971 was as low as 14,7% whereas the corresponding average for the



White candidates was 81,3%.

Some of the reasons for this vast difference in the performance between the White and Indian candidates could, perhaps, be attributed to the following anomalies that existed at the time.

In the absence of streaming in Indian secondary schools, Indian candidates were deprived of the benefits flowing from streaming as in the White schools.

In the White secondary schools the pupils from the beginning of Standard VII were placed in either the Advanced Grade or the Ordinary Grade. Pupils were placed in separate classes which facilitated differentiated teaching. In Indian secondary schools all the pupils of varying ability range were placed in common heterogeneous class groups and teaching was normally aimed at the average to the detriment of the extreme ability groups.

All Indian pupils from Standard VII to X were regarded as Advanced Grade pupils from 1963 to 1966 and wrote the examination on the Advanced Grade only.

Prior to 1972 Indian teachers were not allowed to be appointed as sub-examiners. All examiners, moderators and sub-examiners were chosen from the ranks of the White teachers. Thus Indian teachers were not given any opportunity of gaining the experience in marking techniques. There was no feed-back on marking techniques and mark allocation. All that Indian schools received were the examiners' reports which were of a general nature. This lack of involvement of Indian teachers in the final evaluation of their candidates often led to much speculation and suspicion. Questions were asked whether the fact that the Marri-



ulation examination was conducted on racial lines had anything to do with the large number of Indian *failures* than White *failures*.<sup>(18)</sup>

### 3.4.3 The Period during Streaming in Indian Schools under the Department of Indian Affairs

In 1967 the Department of Indian Affairs introduced streaming in its secondary schools. This streaming system was based on the streaming pattern of the Natal Education Department.

It was shown in Table 3.1 that, with the introduction of streaming, the percentage of passes in Standard VI improved progressively from 39,6% in 1968 to 48,5% in 1970. The results in Standard VII during the period 1967 to 1970 also showed a marked improvement especially in the pass rate in the Advanced Grade. The same progress has been noticed in Standard VIII and Standard IX. However, it will be noticed that the *failure* rate in the Ordinary Grade in Standard VII to X was proportionately high. This suggests that the Ordinary Grade examination programme was beyond a large percent of Indian pupils.

According to Behr and MacMillan<sup>(19)</sup> the names Advanced and Ordinary Grades were misnomers. Below average pupils cannot be termed "Ordinary". In fact a Committee of Enquiry under the chairmanship of Professor R.E. Lighton set up in 1963 criticised this aspect and it stated that there should be three streams, A, B, and C for the above average, average and below-average groups.<sup>(20)</sup>

With reference to the Senior Certificate examination it was stated earlier that up to the March supplementary examination of 1972, the Natal Education Department fully controlled the Natal Senior

Certificate examination for both the Natal White and Indian candidates. As from November 1972, the Department of Indian Affairs arranged to purchase the Natal Senior Certificate examination papers for its Indian candidates. From this date, however, Indian candidates wrote the Senior Certificate examination under the rules of the Department of Indian Affairs. Indian sub-examiners were appointed to mark examination scripts under the supervision of White examiners appointed by the Natal Education Department. This practice continued until the end of 1974.

Referring to Table 3.16 it will be seen that the results of the Senior Certificate examination conducted by the Department of Indian Affairs appears to have improved appreciably. The average pass rate during these two years was about 57% against an average of about 44% for the two previous years. The percentage of Indian candidates passing with Matriculation exemption also showed a marked improvement after the introduction of streaming.

The experience gained by Indian sub-examiners appears to have permeated the Indian secondary schools. The beneficial influence of this experience appears to manifest itself in the improvement in examination results. Referring to Table 3.14 it will be observed that the average pass rate in the Senior Certificate examination of 1973 and 1974 was about 57% compared with an average of 44% for the previous two years.

Although the system of streaming in Indian schools did have a beneficial effect, the main criticism of this system was:

In Indian schools the selection into Advanced Grade and Ordinary Grade streams was based solely on the results of the Senior Certificate examination.



examination. Once placed in a particular stream it was not flexible enough to change streams during the year. Further, this system did not take into account that it was possible that a pupil who had passed on the Ordinary Grade, might have liked to take a particular subject on the Advanced Grade level. In fact the Lighton Committee<sup>(21)</sup> which was set up in 1973 on differentiation in Natal schools, criticised the selection procedure in the system of streaming as "too restrictive and inflexible".

#### 3.4.4. The Period during the introduction of the New System of Differentiated Education

The new system of differentiated education was introduced in Indian schools in 1973. This was the first time that an educational programme was designed to suit individual aptitude, interest and abilities. Although it will be premature at this early stage to evaluate critically the examination results under this new educational system, it will be necessary to comment on certain aspects.

Looking at the internal examination results, it would appear that there is a proportionately high percentage of pupils passing into the Practical Course. The Practical Course is planned for pupils of an IQ range of 80-90. In actual practice we find that pupils of above-average IQ are being placed in the Practical Course. The following data selected randomly from 25 schools, both primary and secondary, illustrate the point.



TABLE 3.21

INCIDENCE OF PUPILS WITH IQ RANGE OF 101-131 + IN THE PRACTICAL COURSE IN 25 INDIAN SCHOOLS IN 1977

I.Q.	Std. VI	Std. VII	Std. VIII
101 - 115	363	890	959
116 - 130	46	115	155
131+	1	2	7
Totals	410	1 007	1 121

Source: Information supplied by the Guidance Officer - Department of Indian Affairs.

From the above table and from the preceding discussion, it is evident that the proportionately high percentage of average and above-average pupils are being promoted into the Practical Course. This suggests that either the pupils are underachieving or the internal examinations are too stringent.

The process of sifting appears to be continuous in the Junior Secondary phase. It was noticed earlier on, that after the initial classification into the Academic Course based on the overall results of the final Standard V examination, the pupils who were placed in the Academic Course in Standards VI and VII still undergo the process of sifting. The sifting is apparently done solely on the results of the internal examinations. It is pertinent to ask whether the schools are manipulating the situation to place more pupils into the Practical Course so that only a select lot of pupils would attempt to write the prestigious Senior Certificate examination.

According to Brown<sup>(22)</sup> the "internal examination does not remove the evils of bad examining... it removes it only one stage further from public gaze".

In so far as the Senior Certificate examinations are concerned the new system of differentiated education appears to have a good effect on the examination results. However, an analysis of the passes in the individual subjects shows that too many candidates are still taking individual subjects on the Higher Grade. That the subjects taken on the Higher Grade are beyond the capabilities of some of the pupils is evidenced by the fact that the conversion of Higher Grade *failure* into pass on the Standard Grade is increasing.

The results of the examinations held under the new system of differentiated education show a greater percentage of passes. While this improvement in the results is in keeping with the principle of differentiation, whereby each individual pupil is given an educational programme to suit his individual needs, the general improvement also suggests other factors that could account for the overall improvement in the examination results. In summary these factors are, *inter alia*, the new approach to curriculum development with the emphasis on teaching objectives; better teaching methods with increasing use of educational technology; better supervision of instruction based on expert subject guidance by senior teachers and Academic Inspectors specializing in subject areas; better and adequate specialist facilities at schools, and the use of school guidance services.

The improvement, especially in the Senior Certificate examination, could also be attributed to the fact that candidates for the Senior Certificate examination have already gone through the process of sifting in the Junior secondary course as was shown earlier in this chapter. By the time the candidates reach the Senior Certificate examination, they are, therefore a selected group.

#### 3.4.5 The holding power of Indian schools

For many years the holding power of Indian schools or its reciprocal connotation, the drop-out rate has been determined by internal as well as external factors. Among the latter were, the lack of compulsory school attendance and socio-economic conditions.<sup>(23)</sup>

However, the internal factors possibly play even a greater role in influencing the drop-out rate than the external factors. According to Malherbe<sup>(24)</sup> there may be several factors which influence the drop-out rates in schools, but he says the schools themselves cannot escape some of the blame. Apart from failure of the educational system to offer an educational programme to suit the individual needs of pupils, the drop-out rate is also influenced by the hurdles set up by the school system by way of examinations at different stages in order to meet certain standards required by society in the economic and professional spheres. It has been shown earlier in this chapter, how pupils were forced to discontinue their schooling, if, in their Standard VI examinations, the pupils failed to pass with a continuation certificate.

For many decades, the educational programme was the same for all pupils, irrespective of their intellectual abilities. Under these



circumstances many who could not make the grade dropped out. There can, however, be big wastage in the education system even though there is no drop-out. The mere physical presence of pupils in school who have not the ability to cope with what is offered may be wasteful in so far as they may take up too much of the teacher's time to the detriment of the other pupils in the class. (25)

In the accompanying graph the holding power of Indian schools is illustrated for three periods, i.e. the period before streaming in Indian schools, the period during streaming in Indian schools and the period during the new system of differentiated education. In Figure 3.8 pupils in class (i) in a particular year are taken as 100% as a starting point. The end point of the particular year group is Standard X. Each successive class from class (ii) to Standard X is expressed as a percentage of the number of pupils in class (i) in the particular year.

From Figure 3.8 it can be seen that, with the introduction of streaming and differentiated education the holding power of Indian schools is improving. In 1966 only about 9% of the cohort reached Standard X and in 1976 the percentage of pupils reaching Standard X was 21%.

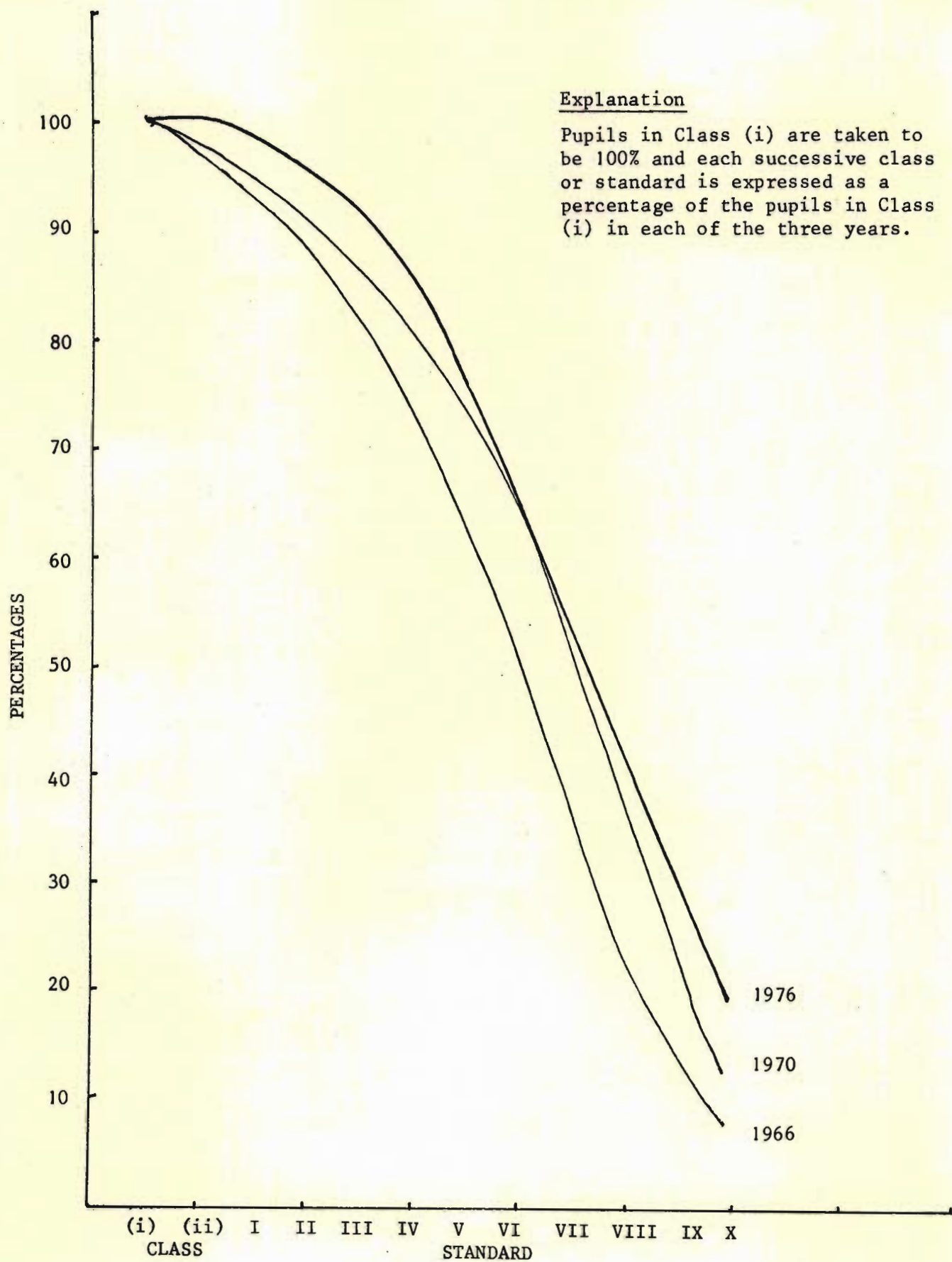
In Table 3.22 the elimination rate for every 100 pupils who entered Standard VI during the period 1972-1977 is set out.

Before the introduction of the new system of differentiated education in Indian schools, for every 100 pupils in 1966 in Standard VI, there were: (26)

62,6	pupils	in	Standard	VII	in	1967
49,9	"	"	"	VIII	in	1968
30,8	"	"	"	IX	in	1969
20,2	"	"	"	X	in	1970

FIGURE 3.8

Holding power of Indian Schools:- 1966-1970



After the system of differentiated education was introduced in Indian schools, for every 100 pupils in Standard VI in 1973, there were:

93,1 pupils in Standard VII in 1974  
 81,0 " " " VIII in 1975  
 38,9 " " " IX in 1976  
 29,9 " " " X in 1977

It will be noticed that after the introduction of the new system of differentiated education in Indian secondary schools, the holding power of the schools shows great improvement, especially in Standard VII and VIII. The position has not improved very much in the Standard IX and X. However, the position should improve as the new educational programme fully establishes itself.

TABLE 3.22

ELIMINATION OF SECONDARY PUPILS IN INDIAN SCHOOLS IN NATAL  
1972-1977

Year	Std. VI	Std. VII	Std. VIII	Std. IX	Std. X
1972	100	71,5	63,6	39,9	30,5
1973	100	81,9	58,3	45,1	28,6
1974	100	93,1	62,4	44,6	31,4
1975	100	93,9	81,0	34,4	27,4
1976	100	95,8	99,1	38,9	24,8
1977	100	94,7	99,5	49,6	29,9

(Source: Department of Indian Affairs - Division of Education.  
 Pupils Statistics File No. 19/46/2)



Although the system of differentiated education could be responsible for the improvement in the holding power in Indian secondary schools, there may be other factors as well which could be contributing to the decrease in the pupil elimination rate. The Indian community has always valued education and since the post-war years, the community has come to realise that in education lies the key to self-development. In this highly competitive industrial society where a prospective employer has to sift and select, take one and leave out another, the demands for intellectual ability are increasing all the time.

With greater job opportunities being opened up for Indians, the Indian youth realises that in order to compete for better and more lucrative jobs, a high level of education is a great advantage.

The standard of living of the Indians in the urban areas, has also improved and this improvement in the living standard has made it possible for the Indian parents to allow their sons and daughters to stay on longer at school.

#### REFERENCES

1. Department of Indian Affairs - Division of Education Circular No. I.E. g 1972 File No. 19/15/6/2.
2. Behr, A.L. and MacMillan, R.G.: *Education in South Africa* Van Schaik, Pretoria, 1971 p.173.
3. Lighton, R.E. cited by Behr and MacMillan *ibid* p.173.
4. Department of Indian Affairs - Division of Education Circular No. I.E. Ay of 1974.
5. Department of Indian Affairs - Division of Education Circular No. I.E. 28 of 1972 File No. 19/15/6/2.
6. Behr, A.L.: *A Textbook of Educational Method*. J.L. van Schaik Pretoria, p.138.

7. Department of Indian Affairs - Division of Education File No. 19/45/3.
8. Van der Walt, N.: Failure at School, "Part II" *Fiat Lux* Vol. 7, No.10 December 1972. pp.20-22.
9. Wall, W.D., Schonell, F.J. and Olson, W.C.: *Failure in School - An International Study* UNESCO, Hamburg 1962. pp.23-31.
10. Transvaalse Onderwysdepartement - "Druiping in Standard 9." Ten opsigte van alle Provinsiale Hoërskole in Transvaal - Desember 1965 NR. 144. Uitgevoer in die Onderwysburo Oktober 1967. p.8.
11. Department of Indian Affairs - Division of Education File No.
12. Malherbe, E.G.: *Education in South Africa* Vol. II: 1923-75, Juta 460 Cape Town 1977. p.441.
13. Department of Indian Affairs - Division of Education File No. 19/46/4/3.
14. Wall, W.D., Schonell, F.J. and Olson, W.C.: op.cit., p.31.
15. Department of Indian Affairs - Division of Education Circular No. I.E. 32 of 1976 File No. 19/34/1/16.
16. Naguran, C.A.: "Differentiated Education Well on its way" *Fiat Lux* Vol. 10 July 1975. p.19.
17. Province of Natal: *Report of the Provincial Education Committee 1946 (Wilks Report)* p.218.
18. The Natal Mercury : Report 18 January 1972.
19. Behr, A.L. and MacMillan, R.G. op.cit., p.173.
20. Lighton, R.E. cited by Behr, A.L. and MacMillan R.G. *ibid.*, p.177.
21. *Ibid.*, p.173.
22. Brown, M. cited by J.K. Craig: *Internal Assessment in Secondary Schools with Special Reference to Certain Overseas Countries.* Lecture delivered at the National Conference on Evaluation. 5 July 1974 Witwatersrand University. p.21.
23. Malherbe, E.G.: op.cit., p.251.
24. *Ibid.*,
25. *Ibid.*,
26. Van der Walt, N. op. cit., pp.20-22.

#### 4. A STUDY OF FAILURE AT THE STANDARD VIII LEVEL IN A SELECTED GROUP OF INDIAN SECONDARY SCHOOLS IN NATAL.

##### 4.1 THE NATURE OF THE PRESENT STUDY

The present study is primarily a descriptive *ex facto research*<sup>(1)</sup> study. According to Behr,<sup>(2)</sup> descriptive or *ex post facto research* precedes other types of research because before progress can be made in solving certain problems one needs to show what the existing facts and prevailing conditions are.

In any dynamic situation facts concerning existing conditions are only part of the picture. What is of greater importance is the conditions desired. For example, in judging academic performance we need not only information describing academic performance, but we must have standards with which to compare the level of performance.<sup>(3)</sup> Descriptive studies must seek to discover cause and effect relationships, and attempt to give interpretations as well.<sup>(4)</sup>

As an Education Planner in the Division of Education, Department of Indian Affairs, the present researcher is aware of the importance of descriptive studies in educational planning. Descriptive researches are of value to decision-makers and policy-makers when they identify and illuminate emergent problems.<sup>(5)</sup>

Behr<sup>(6)</sup> states that descriptive research can be classified into three main types: (i) surveys (ii) developmental studies, and (iii) case studies.

The present study falls into the first category. The survey is one of the most widely used types of descriptive research in the behavioural



sciences. Its purpose is to obtain information about prevailing conditions on a planned basis. The data may be obtained from a total population or from a representative sample from which certain generalisations may be made. The survey gathers its data from a relatively large number of cases at a particular time, and is concerned not with characteristics of individual cases, but with over-all statistics from which abstractions and conclusions can be drawn. (7)

#### 4.2 PROCEDURE IN THE PRESENT STUDY

The purpose of the present study is to investigate *failure* at the Standard VIII level in a group of selected Indian secondary schools in Natal.

The Standard VIII Academic Course pupils were chosen in particular, because, under the new system of differentiated education, they made up the only group of pupils at the time who had (by the end of 1974) written the internal Standard VIII examinations after having had the benefit of an exploratory year in Standard VII in the previous year. (8)

##### 4.2.1 Sampling

###### (i) The Schools

As at March 1974, there were 51 Indian secondary schools in Natal distributed as follows:

Of the 27 State and State-Aided secondary schools in the Durban and District area, there were 16 schools in the Southern Durban area (Chatsworth - Merebank - Clairwood complex), 4 schools in the Western area of Durban, 6 schools in the Central Durban area and one in the Northern area of Durban.

TABLE 4.1

DISTRIBUTION OF INDIAN SECONDARY SCHOOLS IN NATAL

Area	Type of school	Number
Durban and districts	State school	24
	State-aided schools	3
Pietermaritzburg and districts	State schools	4
Northern Natal	State schools	6
North Coast	State schools	10
South Coast	State schools	4
Total: State schools 48 + 3 State-aided schools =		51

Source: Department of Indian Affairs. Division of Education  
Report of the Director; January 1974- December 1974

Since it was necessary to examine the relationship between *failure* and several variables, it was decided that a large representative sample of schools should be selected in order to produce statistically dependable results.

Therefore sixteen secondary schools were selected to represent a cross-section of the various urban, sub-urban and rural areas of Natal. Table 4.2 shows the distribution of the 16 schools according to the areas. Thirteen of them were mixed schools (boys and girls) while three were single sex schools (two for boys and one for girls). Fourteen of the sample schools were H1 schools which have enrolments of 600+ pupils while two to them, viz. Orient High School and Dundee High School, were H2 schools with enrolments of not more than 600 pupils.

The sixteen sample schools in this study were selected to cover a wide spectrum of the socio-economic stratum of the Indian community in Natal.

TABLE 4.2

DISTRIBUTION OF SAMPLE SCHOOLS USED IN THIS STUDY

School	Area	1974 Std VIII enrolment		
		Boys	Girls	Total
1. Westcliff High school	Southern Durban	81	38	119
2. Southlands High School	" "	70	39	109
3. Glenover High School	" "	72	53	125
4. Merebank High School	" "	62	54	116
5. Sastri College	Central Durban	119	-	119
6. Orient High School	" "	75	-	75
7. Gandhi-Desai High School	" "	83	33	116
8. Durban Indian Girls High	" "	-	159	159
9. Reservoir Hills High	Western Durban	61	44	105
10. M.L. Sultan-Pietermaritzburg High School	Pm. Burg	43	35	78
11. Raisethorpe High School	" "	72	35	107
12. Dundee High School	Northern Natal	44	21	65
13. Tongaat High School	North Coast	65	37	102
14. Stanger High School	North Coast	102	64	166
15. Isipingo High School	South Coast	71	44	115
16. Umzinto High School	" "	72	39	111
Total		1 092	695	1 787

Source: Department of Indian Affairs, Division of Education. Schools' Staff Return Schedules 1974.

The four schools selected from the southern areas of Durban represent a good cross-section of the school population. According to a recent survey by the University of Durban-Westville<sup>(9)</sup>, the population of Chatsworth is drawn from all over the Durban metropolitan area, and thus encompasses a wide range of socio-economic levels.

Sastri College is a well established and renowned high school in the heart of Durban. It is purely a boys' school, while the Durban Indian Girls' High School is purely a girls' school, also situated in the heart of Durban. Both these schools draw their pupils largely from the Durban central area. Pupils attending these two schools come from homes, generally regarded financially as above-average to wealthy.



Gandhi-Desai and Orient Islamic high schools are State-aided high schools, in that the community provided the school sites and built the schools on a Rand for Rand basis. Except for providing equipment, furniture and general maintenance of these schools, the Department of Indian Affairs is responsible for the provision and payment of salaries of teachers, text and reference books and other teaching aids.

Such schools are managed by school grantees elected by the proprietors. Generally the grantees exercise the right to admit pupils to these schools.

In all other respects the State-aided high schools follow the same educational programme as the State high schools and are subject to the overall control of the Department of Indian Affairs.

Gandhi-Desai High School was built by the Gujerati-speaking community. Although in its admission of pupils preference is given to Gujerati-speaking children at this school, the Departmental school-zoning measures ensure the admission of the other language group children as well.

The Orient Islamic High School was built by the Moslem community. This has predominantly Moslem children. Both these schools are situated in the central Durban area and draw the bulk of their school population from the above-average to wealthy homes.

Reservoir Hills High School is situated in the Western area of Durban. Reservoir Hills is generally regarded as an above-average socio-economic residential area.

Isipingo High School is situated south of Durban and the pupils attending this school are regarded as coming from average to above-average socio-

economic homes.

The Raisethrope High School and the M.L. Sultan Pietermaritzburg High School are situated in Pietermaritzburg. The Raisethorpe High School draws its school population from a wide spectrum of the socio-economic stratum ranging from below average to wealthy homes.

The M.L. Sultan Pietermaritzburg High School was formally controlled by the M.L. Sultan College in Durban. When the M.L. Sultan Technical College assumed the status of a College for Advanced Technical Education in terms of Act No. 12 of 1968, its branch in Pietermaritzburg came under the control of the Department of Indian Affairs. This former technical high school still continues to offer courses with a technical bias. Pupils attending this school also come from homes covering a wide cross-section of the population in Pietermaritzburg.

Dundee High School, Tongaat High School and Umzinto High School are situated in semi-rural areas. Pupils attending these three schools come from the outlying areas as well as from the central business areas in the respective boroughs. Thus, the pupils at these schools represent the rural, semi-rural and semi-urban communities of Natal.

The sixteen schools in the sample are fully representative of all the Indian language groups.

Since the location of the schools used in this study indicates a good geographical coverage of the Indian areas in Natal, the sample schools were considered to be representative of the population under study.

(ii) Pupils in the Sample

Since it was not possible to include the total Standard VIII pupils

in Natal in this study, a representative sample from the sixteen schools listed in Table 4.2 was considered as follows:

All the pupils who were in the Standard VIII Academic Course in 1974 in the sixteen sample schools, formed the cohort of this study. Information regarding the number of pupils who passed and failed the Standard VIII Academic Course examination at the end of 1974 was obtained from personal interviews with the principals of these sixteen schools. Information was also obtained about the number of pupils who, after having passed or failed Standard VIII Academic examination, left school at the end of 1974.

All the pupils who wrote and failed the Standard VIII Academic Course examination in 1974 were classified as the *failure group*. All the pupils who passed the Standard VIII Academic Course examination in 1974 were classified as the *promoted group*.

The following is the break-down of the pupils in the cohort who were in the sample schools in 1974.

TABLE 4.3

BREAKDOWN OF PUPILS IN THE COHORT OF STANDARD VIII IN THE SAMPLE SCHOOLS IN 1974

	Boys	Girls	Total
No. wrote	1 092	695	1 787
No. passed	933	623	1 556
No. failed	159	72	231
No. left school at the end of 1974	30	26	* 56
No. returned to school in 1975	1 063	668	* 1 731
No. in promoted group	918	608	* 1 526
No. in failure group	145	60	* 205

Note: The asterisks refer to the number in the *promoted* and *failure* groups referred to above.



According to Borg<sup>(10)</sup> other things being equal, the larger the sample employed in the research, the smaller will be the standard error and the greater the likelihood of obtaining significant results. In many educational research problems, "it is impossible for the research worker to control some of the important variables that could have an effect on research findings."<sup>(11)</sup> Under these conditions, the research worker can have more confidence in his findings if he employs a large random sample. The large random sample insures to some extent that the uncontrolled variables will themselves be operating randomly for the different groups being studied and therefore will not have a systematic effect upon the results.

In 1974 there were approximately 5 500 pupils in the Standard VIII Academic Course in all the secondary schools in Natal.<sup>(12)</sup> Out of the approximately 5 500 pupils, a random sample of 1787 pupils or 33% was taken for the purpose of this research study. The sample, therefore, can be regarded as representative of the Standard VIII Academic Course pupil population.

#### 4.2.2 Choice of Method for Gathering Information

In this study it was decided to use the questionnaire method to obtain information. According to Behr<sup>(13)</sup> the questionnaire method continues to be, if properly constructed and administered, the best available instrument for obtaining information from widely spread sources.

Two sets of questionnaires were used in this study. One set of questionnaire was used to obtain information direct from pupils, and another set was used to obtain certain information from the pupils'

form masters/mistresses. This questionnaire was also used to verify certain information supplied by the pupils.

#### 4.2.2.1 The teachers' questionnaire

Care was taken to ensure that the questionnaire (see Appendix B) did not present any difficulty to the respondents. Most of the responses were required to be indicated by placing a cross (X) in the appropriate space. Some questions were of the rating type.

In the teachers' questionnaire, questions 1 to 12 were of the *closed type* requiring the respondent to place a cross (X) in the appropriate space. An example of a *closed type* of question in the teachers' questionnaire is given below.

- " 9. Please indicate the number of subjects in which this pupil failed at the end of 1974 (This applies to all pupils whether passed or failed).

0	1	2	3	4	5	6

"

An example of the rating question used in this questionnaire is:

- " 14. Please place a cross (X) in the appropriate space for each of the following personality traits (in respect of the pupil).

Personality traits	Very weak	Weak	Average	Good	Outstanding
1. initiative and zeal					
2. Self-confidence					
3. Perseverance					
4. reliability					
5. social adaptability					

"

The teachers were informed during the interview session that they were to insert one cross and one cross only in each column.

#### 4.2.2.2 Pupils' Questionnaire

Care was taken to ensure that the questionnaire did not present difficulty to the respondents. Most of the questions were of the *closed* form, requiring the respondents to place a cross (X) opposite one of several possible answers. An example of this type of question is given below: (see Appendix C)

"1.(h) What language group do you belong to?

Tamil	Hindi	Telegu	Gujerati	Urdu	Other

A few attitude-scale type of questions were also included in the pupils' questionnaire. An example of this type of question is given below:

" 20. Do you attend school because:

	Yes	No	Don't know
(a) you like school			
(b) you were forced to attend school			
(c) you have a strong desire to succeed in life			

It was made clear to pupils that one and only one cross was to be inserted in the appropriate column. Each response to this question was considered only when one cross appeared in the nine spaces. If a pupil placed more than one cross, the response to this question



was disregarded. However, it would appear that the respondents followed the instructions well, as there was a negligible number who placed more than one cross.

#### 4.2.3 Distribution of questionnaires

As an Educational Planner responsible for curriculum development in Indian schools, the present researcher was able to get the ready co-operation of the principals and teachers. Personal visits were made to all sixteen schools. During these visits, the nature and purpose of the study and the importance of the study from an educational planning point of view, were explained. The questionnaires were distributed personally during the month of April 1975.

The procedure for administering the questionnaires was fully explained to the principals and the form-masters/mistresses of the respective schools. Trial practices in completing the questionnaire were held during these visits.

Sufficient time (about three weeks) was given to each school to complete the questionnaires to ensure that the pupils belonging to the cohort, and who were absent, were given the opportunity to complete the questionnaires.

In respect of the teachers' questionnaires, it transpired during these visits that some of the form-masters/mistresses in the sample schools either had been promoted or transferred to other schools. In such cases it was decided that the principal of the school appoint a teacher who had had reasonable contact-time with the sample pupils, to fill in the questionnaires.

It was also emphasised that the form-masters/mistresses had to complete questionnaires in respect of *all* the pupils who were in his/her Standard VIII Academic Course group in 1974. This included those who wrote the examination at the end of 1974 and left school.

#### 4.2.4 Replies received

(i) Pupils' questionnaires: A total of 1 731 completed questionnaires were received. With reference to Table 4.3 it will be seen that the total number of the 1974 Standard VIII Academic Course pupils who returned to school in 1975 was 1 731. Therefore the response in this case was 100%.

(ii) Teachers' questionnaires: As shown in Table 4.3, the total number of pupils who wrote the Standard VIII Academic Course examination at the end of 1974 was 1 787. Questionnaires completed by the teachers in respect of the pupils numbered 1 787. This was also a 100% response.

In general, the administration of the questionnaires was considered to be a complete success. This may be attributed, *inter alia*, to the following factors:

- (a) the personal visit by the present researcher and the considerable time spent in discussing with the principals and the teachers all aspects of the questionnaire;
- (b) the simple and straight-forward nature of the questions;
- (c) the fact that the present researcher is an Education Planner ensured ready co-operation from principals, teachers and pupils;



- (d) the importance of the study itself. (After all, *failure* and *success* are matters of interest to all teachers and principals.)

#### 4.2.5 Checking and Verifying

All the questionnaires were received within three weeks after distribution. On receipt of the questionnaires, the pupils' questionnaires and the corresponding teachers' questionnaires were carefully sorted out and mechanically numbered so that a particular pupil's questionnaire had the same serial number as the teacher's questionnaire in respect of that particular pupil. It should be stated here, that in order to preserve anonymity, the pupils were requested not to write their names on the questionnaires. Instead they had to write their admission numbers on their questionnaires. The teacher's questionnaire also carried the respective pupils admission number.

In the teachers' questionnaire, there were several items which were used to verify pupils' responses. For example, the pupils had to indicate on their questionnaires the number of subjects they had failed in the Standard VIII examination. The teachers were also asked to indicate this information on their questionnaires. When this information indicated on the pupil's questionnaire did not tally with the information supplied by the teachers, it was queried and rectified by referring such questionnaires to the schools concerned.

### 4.3. DATA PROCESSING AND STATISTICAL ANALYSIS OF RESULTS

#### 4.3.1 Data processing

Since the sample was very large and the questionnaires were comprehensive, it was decided to observe the following procedure:



(i) Pupils' questionnaires:

There were 1 731 pupils' questionnaires. Each questionnaire contained 7 pages and a total of 60 questions. It was impossible to process the data manually within a reasonable time. It was therefore decided to process the data by computer.

The researcher discussed the whole matter of data processing with the ICL computer firm. Since the questionnaires were not pre-coded, it was decided to give each item a code number. The ICL computer firm supplied the data processing COBOL programme sheet. The numerical codes were transferred mechanically on to the data processing sheets. The coded data were punched from the data sheets to ICL punch cards. The services of an experienced punch card operator was used. The data for each pupil was punched on a separate card. Each card, after it had been punched, was verified by the use of an automatic verifier.

A computer programme was written in the COBOL language to process the data in respect of the *failure* group and the *promoted* group.

The computer programme did not include the working of Chi-square and other statistical techniques used in this study. These were done manually by the use of an electronic calculator.

(ii) The teachers' questionnaires:

Since most of the information obtained from the teachers' questionnaires was used for the purpose of verifying information supplied by the pupils, and in view of the additional costs involved, it was decided to process data from these questionnaires manually. Score-sheets were prepared and the data transferred mechanically on to the score sheets. The electronic calculator was used to process data.

#### 4.3.2 Methods of Statistically analysing the Results

As stated earlier, the purpose of this research study was to find if there was any causal relationship between *failure* and a number of variables. It was therefore necessary to subject the data obtained from the questionnaires to statistical analysis techniques. In order to test the significance of its relationship with *failure/success* the Chi-square statistical method was used. Details of these variables are listed under 4.4 of this chapter. According to Downie and Heath<sup>(14)</sup> the  $X^2$  technique is used as a test of significance when the data are expressed as discrete frequencies.

The  $X^2$  statistics is known as *nonparametric* or *distribution free* statistics. It is a very useful test of significance because no assumptions are necessary about the shape of the parameter distribution.

The  $X^2$  statistics is a method of determining whether the differences between the theoretical and the observed frequencies in any number of categories can reasonably be attributed to chance variations in sampling.<sup>(15)</sup> The question arises as to whether the differences between the observed and theoretical frequencies are significant. In this content, the null hypothesis is that no differences exist between the observed and theoretical frequencies. If the observed frequencies depart significantly from the theoretical frequencies, this constitutes evidence for the rejection of the theoretical frequencies.<sup>(16)</sup>

In the following example the calculation of the theoretical or expected frequencies and the  $X^2$  is shown. (Question 1(f) pupils' questionnaire.)

We wish to test the hypothesis that academic performance of the Standard VIII pupils (boys) is independent of the religious group which the pupils belong to. The calculations are set out in the table below.

TABLE 4.4

CALCULATION OF  $X^2$  IN A TEST OF INDEPENDENCE (TESTING HYPOTHESIS THAT ACADEMIC PERFORMANCE IS INDEPENDENT OF RELIGIOUS GROUPS).

	Hindu	Islam	Christian	Total
Promoted group	422 a	134 c	50 e	606
Failure group	44 b	5 d	8 f	57
Total	466	139	58	663

$$\text{Chi-square } (X^2) = \sum \left\{ \frac{(A - E)^2}{E} \right\}$$

where A = actual frequencies

E = expected or theoretical frequencies

	A	E	A - E	$(A - E)^2$	$\frac{(A - E)^2}{E}$
a	422	425,9	-3,9	15,2	0,035
b	134	127,0	7,0	49,0	0,385
c	50	53,0	-3,0	9,0	0,169
d	44	40,6	3,4	11,56	0,284
e	5	11,9	-6,9	47,6	4,000
f	8	4,9	3,1	9,1	1,961
				$X^2 =$	6,834

$$df = 2 \quad p < 0,05$$

At the 0,05 level of significance, the null hypothesis that academic performance is independent of religion is rejected. In other words, in this example religion has an influence on academic performance.



In dealing with the attitude-type of responses the weighted mean method was used in this study. The over-all attitude of the form-masters/mistresses to a particular statement is measured by a score which is the mean of the sum of the weights given by the respondents. To obtain the mean the number of responses in each category was multiplied by the appropriate numerical weighting; the products were added and the sum divided by the total number who replied to that item.

An example is given below of one such calculation (question 13.1 - Teachers' questionnaire.)

TABLE 4.5

TEACHERS' RESPONSES TO PUPILS' BEHAVIOUR

14.1 Nervousness	Certainly Applies	Applies Somewhat	Doesn't Apply	Total
Numerical Weighting	(1)	(2)	(3)	
No. of responses	37	243	653	933

Calculation of the  $(\bar{X}) = 37 \times 1 + 243 \times 2 + 653 \times 3$

Mean  $(\bar{X}) = \frac{\text{Sum of products}}{\text{Number of Respondents}}$

$$37 + 486 + 1959 = \frac{2482}{933} = 2,7$$

In the above example the mean  $(\bar{X})$  must range between 1 and 3. The closer  $\bar{X}$  is to 1, the more obligatory the behaviour mentioned in the statement was felt to be. (17)

Since the mean of 2,7 in the above example is not close to 1, i.e. the strongest rating, nervousness, as observed by teachers, was not regarded as having any influence on academic performance.

#### 4.4 THE RESULTS OF THE PRESENT STUDY

As stated earlier, the aim of the present study was to ascertain whether there was any causal relationship between *failure* at the Standard VIII level and the following variables:

1. sex
2. age
3. fathers' occupation
4. parents' level of Western education
5. family income
6. material comforts at home
7. religion
8. language mainly spoken at home
9. birth order and number of siblings
10. intelligence
11. health of pupils
12. study and reading habits
13. extra-curricular activities
14. absenteeism
15. school transfer
16. choice of subjects and courses
17. teachers' assessment of pupils' behaviour and certain personality traits.

To test for significance of the relationship between *failure* and the variables numbered 1 to 15, the Chi-square statistics as described earlier, will be used. The weighted mean ( $\bar{X}$ ) also described in the previous pages, will be used to assess the teachers' responses to the attitude-type variables, (item 17 above).

The results in respect of the above variables will be set out and discussed in the following pages.

#### 4.4.1 Sex of the pupils and Academic performance

Does the incidence of *failure* occur more amongst boys than girls? According to a UNESCO report on *failure*<sup>(18)</sup> data from the various studies do not agree as to whether *failure* is more marked amongst boys than girls. However, a study, carried out in 1953 by the Royal Board of Education in Swedish secondary schools, shows a different picture.<sup>(19)</sup> The study found that the overall percentage of *failure* was much higher among boys than girls. Van der Walt<sup>(20)</sup> found in 1962 that the *failure* rate amongst girls in all standards was lower than the boys.

In the present study the position was as follows:

TABLE 4.6  
ACADEMIC PERFORMANCE ACCORDING TO SEX OF PUPILS

	BOYS	GIRLS	TOTAL
Promoted group	918	608	1 526
Failure group	145	60	205
Total	1 063	668	1 731

$$X^2 = 8,49$$

$$df = 1$$

$$p < 0,01$$

The results show that the difference in academic performance between



boys and girls is significant at the 0,01 level. From the above table it will be seen that the rate of *failure* among the girls is less than that of the boys. In the *failure* group 29,2% were girls and 70,8% were boys.

Although there appears to be a significant difference in academic performance between boys and girls with a lower rate of *failure* among the girls, it would be rash to conclude that the girls are superior to boys. It should be pointed out that, although the enrolment of girls in Indian secondary schools is increasing, girls in secondary schools perhaps, still represent a more select group and perform better at school.

#### 4.4.2 Age of pupils and academic performance

The ages of the pupils used in this investigation are set out in the table below: Is there any significant relationship between age and academic performance?

TABLE 4.7  
AGE AND ACADEMIC PERFORMANCE

	13 - 14yrs		15 - 16yrs		16yrs +		Total	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Promoted group	49	44	733	315	136	51	918	410
Failure group	6	3	110	50	29	5	145	58
Total	55	47	843	365	165	56	1063	468

Boys: X = 2,911  
df = 2  
p > 0,05

Girls: X = 2,754  
df = 2  
p > 0,05

There does not seem to be any significant relationship between the ages

of the pupils and *failure* at the 0,05 level of significance. However, over 80% of the pupils in this study were of normal age for Standard VIII (15 - 16yrs) only about 12% of the sample pupils were above this age range.

#### 4.4.3 Academic Performance and Certain Aspects of Socio-Economic Background.

##### 4.4.3.1 Fathers' Occupation

Fathers' occupation is generally used as an indicator of socio-economic background. (21) (22) The following categories of occupation were obtained from the questionnaire:

Factory worker, Clerical worker, Shop assistant, Own Business, Teacher, Lawyer, and Doctor.

In the present study, fathers' occupation will be used as the indicator of socio-economic background.

As there were very few doctors or lawyers indicated as father's occupation in this study, it was decided to include them with teachers and refer to this group as the professional group.

Factory-workers in this study refers to skilled, semi-skilled and unskilled factory hands. Clerical workers include all office workers and persons in a supervisory capacity such as foremen and factory charge-hands.

Shop assistants refer to assistants in wholesale and retail trades. Own business includes people who are self employed. There were many pupils who indicated fathers' occupation as being "other". This group includes bus drivers, pensioners, waiters, Corporation workers, etc.

TABLE 4.8  
ANALYSIS OF FATHERS' OCCUPATION

	Failure group				Promoted group				Total
	Boys	%	Girls	%	Boys	%	Girls	%	
Factory-worker	54	15	18	5	204	57	85	23	361
Clerical worker	25	11	12	5	114	49	80	35	231
Shop-assistant	9	8	3	3	73	66	25	23	110
Own Business	27	7	11	3	200	52	157	38	395
Professional	4	3	3	2	61	50	55	45	123
Other (waiter etc.)	26	5	13	3	251	51	200	41	490
Total	145	-	60	-	903	-	602	-	1 710

For the purpose of this study, grouping was done according to a status classification by Glass<sup>(23)</sup> modified for use by the Institute for Social Research, University of Natal. The various categories of occupation according to the status classification are set out below:

CLASSIFICATION OF OCCUPATION

Group	Nature of occupation
I	Manual unskilled
II	Manual semi-skilled
III	Routine grades of Non-manual and Skilled manual
IV	Inspectional Supervising and other non-manual. (lower grade)
V	Inspectional supervising and other non-manual. (higher grade)
VI	Managerial and executive (with some responsibility for initiating policy.)
VII	Professionally qualified and high Administrative.



Although the occupational classification obtained from the questionnaires in the present study could not be neatly classified into the categories stated above, the researcher was convinced that accuracy was not being sacrificed if the following classification was adopted:

<u>Low Status</u>	<u>High Status</u>
Factory worker	Own Business
Clerical worker	Professional (teachers, doctors, lawyers)
Shop assistant	
Other (bus drivers, waiters, pensioners etc.)	

TABLE 4.9  
SOCIO-ECONOMIC STATUS AND ACADEMIC PERFORMANCE

	High				Low				Total
	Boys	%	Girls	%	Boys	%	Girls	%	
Promoted group	261	17	212	14	642	43	390	26	1 505
Failure group	31	15	14	7	114	56	46	22	205
Total	292		226		756		436		1 710

Boys:  $X^2 = 3,52$

df = 1

p > 0,05

Girls:  $X^2 = 3,43$

df = 1

p > 0,05

The difference in academic performance between the pupils in the low socio-economic status group and the high socio-economic status group is not significant at the 0,05 level of significance. However, it was found that there was a higher percentage of passes in the low socio-economic status group (68,5%) than in the high status group (31,5%). In accepting the null hypothesis that fathers' occupation does not influence academic performance ( $p > 0,05$ ) it must be pointed out that by grouping the various occupations indicated by the pupils into two categories, i.e. high status and low status, the relationship between fathers' occupation and academic performance could be masked. Perhaps a broader occupational category classification could have produced different results.

The findings in this study do not support the generally held view that fathers' occupation is related to school achievement. For example Banks and Finlayson<sup>(24)</sup> cite several other studies to show a very consistent relationship between fathers' occupation and performance. In their inter-disciplinary study on success and failure in the secondary school, Banks and Finlayson also found that fathers' occupation relates to academic performance. This relationship has been shown to persist when measured ability has been controlled.

It should be pointed out that in the studies cited above, fathers' occupation was shown as an indicator of social class. In western societies, especially in England, class system still persists. Belonging to a particular social class may have certain inspiring influences. A pupil in the upper and uppermiddle class may be subjected to greater pressure for educational success.

A number of theorists have discussed the influence of family's social class position on the child's value structure and academic performance. Despite the different emphasis placed on the causal role of class position in each of these theories they concur in the notion that achievement levels will be partially a function of the child's class position. Increased environmental stimulation, possible in a wealthier position, should provide the child with an advantage as well as a value structure conducive to a high achievement performance. Although value structure and material advantage are not mutually exclusive factors contributing to differential achievement performance, they both can be seen as possible influences on performance. (25)

In the Indian community, social class as such is not so marked as in the western society.

Although occupation plays an important role in studies of social class and academic performance, fathers' occupation alone does not appear to have much influence on the pupils' academic performance as shown in the present study. There are other variables such as material circumstances of the family, family income and the level of the parent's western education which may collectively play an important role in academic performance.

#### 4.4.3.2 Parent's Western level of education

Like occupation, level of parental education is used as a convenient index of socio-economic status. (26) In this study it was found that fathers' educational level did not have much influence on the academic performance of the boys ( $p > 0.05$ ) but it did have an influence on the girls ( $p < 0,01$ ).



Girls, whose fathers' educational level was higher did better in the examination than girls whose fathers had a lower level of education.

(See Table 4.10)

On the other hand the level of mothers' western education seems to have a positive relationship on academic performance. ( $p < 0,05$  : boys  $< 0,01$  girls). Boys and girls with mothers who had a higher level of western education did better than boys and girls whose mothers had a lower level of education. It is not clear as to why the fathers' level of western education did not have any beneficial influence on the boys.

According to Banks and Finlayson<sup>(27)</sup> "a direct link is feasible between the intellectual level of the parents and the "educability" of the home, which can express itself in such practical ways as helping with homework as well as shared tasks of an "intellectual" kind."

The indirect effects of educational background are also likely to be pervasive since the level of education can manifest itself throughout the whole style or way of life.

The positive relationship between mothers' level of western education and pupils' academic performance, perhaps can be traced to the nature of the interaction between mother and child in the early years of life. During this period, language is being acquired. The importance of language in education is self-evident. It is the instrument with which thinking is conducted, so that impoverished linguistic ability is associated with limited cognitive power. Abstract thought and the ability to reason, upon which academic education is based, are almost wholly determined by the possession of and the ability to use language.<sup>(28)</sup>

TABLE 4.10

THE RELATIONSHIP BETWEEN PUPIL PERFORMANCE AND PARENTS' LEVEL OF WESTERN EDUCATION

	FATHERS' EDUCATION								MOTHERS' EDUCATION							
	No education		Cl (i) - Std ii		Std iii- Std VI		Std VII- Std X		No education		Cl (i)- Std ii		Std iii- Std VI		Std VII Std X	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Promoted group	56	15	113	31	444	265	304	297	237	100	173	70	367	302	136	136
Failure group	13	7	16	4	77	28	39	21	34	16	42	14	54	23	14	6
Total	69	22	129	35	521	293	343	318	271	116	215	84	421	325	150	142

$\chi^2$  Boys = 3,834  
 Girls = 16,648  
 df = 3  
 boys  $p > 0,05$   
 Girls  $p < 0,01$

$\chi^2$  Boys = 9,291  
 Girls = 14,917  
 df = 3  
 boys  $p < 0,05$   
 Girls  $p < 0.01$

Therefore the mother's level of education appears to have an influence on the child's learning ability. It follows therefore that the educational level of the parents may be a decisive influence in all the differences in parental values and parental behaviour.

In a study by Dorothea Behr, <sup>(29)</sup> of first-year Indian students at the University of Durban-Westville, it was found that the educational level of the mothers and fathers of the female students was higher than that of the parents of the male students. The explanation she gives is that the parents who have themselves benefited from education, recognise the importance of providing opportunities for higher education for girls.

#### 4.4.3.3 Family Income

The monthly family income of the pupils is set out below:

TABLE 4.11  
MONTHLY INCOME AND ACADEMIC PERFORMANCE

	Under R100		R101-R300		R301 +		Total
	Boys	Girls	Boys	Girls	Boys	Girls	
Promoted group	118	62	560	343	237	202	1 522
Failure group	35	8	87	40	23	12	205
	153	70	647	383	260	214	1 727

$$\begin{aligned} \text{Boys } X^2 &= 16,167 \\ \text{df} &= 2 \\ p &< 0,001 \end{aligned}$$

$$\begin{aligned} \text{Girls } X^2 &= 4,487 \\ \text{df} &= 2 \\ p &> 0,05 \end{aligned}$$

In the case of the boys, the difference between academic performance and income is highly significant ( $p < 0,001$ ). However, in the case of the girls, the level of family income seems to have no influence on academic performance. ( $p > 0,05$ ) It was found that in the *failure group* 17,0% boys and 3,9% girls were in the under R100 per month category, 42,4% boys and 19,5% girls in the R101 - R300 per month



income category and 12% boys and 5,8% girls in the R301 plus per month income category. Among the *promoted* girls, 4% belonged to the under R100 per month category and 22,5% in the R101 - R300 per month category and 13% in the R301 plus per month income category.

It would seem that the girls belonging to the *promoted group* and *failure group* are more or less evenly distributed in the various income categories, hence there does not seem to be any significant relationship between the level of income and academic performance among the girls. However, the findings presented here should be treated with some caution, as reticence concerning family income was experienced among the sampled population. Although very few respondents made any objections to giving this information, the researcher had no means of checking its accuracy.

#### 4.4.3.4 Material comforts at home

To see whether there was any relationship between academic performance and the possession of own room the hypothesis that passing or failing was independent of having one's own room was tested.

In the table below, details about pupils who had their own rooms and those who shared rooms, are set out.

The results show that there is no significant difference between pupils who had their own rooms and pupils who shared rooms and academic performance. ( $p > 0,05$ ) However, it was found that among the *promoted group* 19% boys and 17% girls had their own rooms, whereas among the *failure group* only 2% boys and 1% girls had their own rooms. This suggests that where pupils have their own rooms, they tend to do better than pupils who have to share a room. Children

who have to share a room may not have the privacy for undisturbed homework, etc.

TABLE 4.12

PUPILS WITH OWN ROOMS AND PUPILS WHO SHARED ROOMS AND ACADEMIC PERFORMANCE

	Own Room		Shared Room		Total
	Boys	Girls	Boys	Girls	
Promoted group	332	228	586	380	1 526
Failure group	43	19	102	41	205
Total	375	247	688	421	1 731

$$\begin{aligned} \text{Boys: } X^2 &= 2,16 \\ \text{df} &= 1 \\ p &> 0,05 \end{aligned}$$

$$\begin{aligned} \text{Girls: } X^2 &= 0,830 \\ \text{df} &= 1 \\ p &> 0,05 \end{aligned}$$

In respect of the other material comforts such as having electricity at home and the possession of chairs and tables, it was found that over 94% of both the *promoted group* and *failure group* had electricity at home and possessed tables and chairs. Therefore it was decided not to test these items for significance.

#### 4.4.4 Religion and Academic performance

The hypothesis that academic performance is independent of religion was tested for significance. The results are set out below. The results in Table 4.13 show that there is a significant relationship between academic performance and religious background at the 0,05 level. However, at the 0,01 level it was found that there is no relationship between the religious background and academic performance.



TABLE 4.13

THE NUMBER OF BOYS AND GIRLS WHO PASSED OR FAILED THE  
1974 STANDARD VIII EXAMINATION ACCORDING TO RELIGION

	Hindu		Islam		Christian		Total
	Boys	Girls	Boys	Girls	Boys	Girls	
Promoted group	631	422	201	134	83	50	1 521
Failure group	107	44	19	5	18	8	201
Total	738	466	220	139	101	58	1 722

$$\begin{aligned} \text{Boys: } X^2 &= 6,6 \\ \text{df} &= 2 \\ p &< 0,05 \end{aligned}$$

$$\begin{aligned} \text{Girls: } X^2 &= 6,7 \\ \text{df} &= 2 \\ p &< 0,05 \end{aligned}$$

In the *failure group* there were 75,2% Hindus, 12,9% Christians and 11,9% Islamics. It was found that the *failure* rate was lowest (2,4%) among the Islamic girls.

However, it would be wise to consider the results very cautiously. It would seem that religion *per se* is not the important factor influencing academic performance, but the value structure associated with religion or the motivation instilled in the child which could account for the differences in academic performance.

Moreover, it should be pointed out that pupils of the Islamic faith generally belong to the more affluent group in the Indian community and this could have an influence on the academic performance of the Islamic pupils.

#### 4.4.5 Birth order, Siblings and Academic performance

Numerous studies (30, 31, 32, 33) have shown that there is a relation-



ship between academic performance and birth order. For example Chopra<sup>(34)</sup> found among the Indian children he studied, that although the ordinal position among siblings did not have any consistent relationship with academic performance, one interesting trend noted was that the third-born child ranked first in academic achievement and the sixth or later born were found to be inferior to all other groups.

In another study by Wells,<sup>(23)</sup> it was found that the first-born children generally do better in school than other children. The reason he suggests for this, is that first-born children are at an advantage in that their mothers have more time to devote to shared activities. Hodges and Balow<sup>(35)</sup> found, on the other hand, that it was doubtful that ordinal position is related to academic performance.

In the present study the null hypothesis that birth order has no influence on academic performance was tested. The results are set out below:

TABLE 4.14

BIRTH ORDER AND ACADEMIC PERFORMANCE

	First born		Inter- mediate born		Last born		Total
	Boys	Girls	Boys	Girls	Boys	Girls	
Promoted group	237	159	474	311	205	137	1 523
Failure group	52	19	69	26	22	13	201
	289	178	543	337	227	150	1 724

Boys  $X^2 = 8,092$   
 $df = 2$   
 $p < 0,05$

Girls  $X^2 = 2,426$   
 $df = 2$   
 $p > 0.05$

In the case of the boys there is a significant relationship between academic performance and birth order at the 0,05 level of significance. On the other hand, there seems to be no significant relationship between birth-order and academic performance among the girls at the 0,05 level of significance. The *failure* rate is lower among the first-born boys than in the intermediate-born boys. For example 25% of the first-born boys failed as against 34% of the intermediate-born boys. This suggests that among Indian parents, the expectation for the first-born is greater than those for the intermediate and last-born. The first-born boys perhaps work harder to please their parents.

Betty Miner<sup>(36)</sup> found in her study that birth order and family size are related to the achievement variables with the exception of intelligence variables. Neither socio-economic status nor intelligence appeared to have direct influence on these relationship. First-born children and children in small families tend to achieve at a higher level than later born children in large families.

It is possible that priority of birth is an advantage in gaining material preferences. It is also possible that parental expectations for the first-born are greater than the intermediate and last born-children. Sampson<sup>(37)</sup> found that first-born children have a higher need for achievement.

#### 4.4.5.1 Number of Siblings and Academic performance

Although there is no general agreement that birth order is related to academic performance, there are some suggestions that birth order is unrelated to academic performance in families where there are three or more siblings, but it plays a part in families with two

children. (38)

In the present study the results as set out in Table 4.15 show that the pupils' academic performance is unaffected by the number of siblings in the family. The null hypothesis that academic performance is independent of the number of siblings in the family was accepted at the 0,05 level of significance.

According to a Scottish study<sup>(39)</sup> it was found that after allowing for environmental differences among families of differing sizes, children from large families did not generally score as highly in tests of ability as children from small families. On the other hand Stice et al.<sup>(40)</sup> found no relationship between family size and academic performance.

Although the number of siblings in the family may be a variable affecting the academic level of the pupil, the operation of this variable, however, may have contradictory effects. Large family size means a reduction in the available contact with parents, but increased interpersonal contacts for the pupil with other siblings.

#### 4.4.6 Language mainly spoken at home and Academic performance

Is there any significant difference in the scholastic performance between pupils who speak only English at home and those who speak one of the vernacular languages at home? In Table 4.16 the breakdown of the sample pupils who either spoke English and/or one of the vernacular languages is set out.

The results show that there is no significant difference in academic performance between those pupils who generally speak English at home



TABLE 4.15

NUMBER OF BROTHERS AND SISTERS AND ACADEMIC PERFORMANCE

	NUMBER OF BROTHERS								NUMBER OF SISTERS							
	1 - 2		3 - 4		5 - 6		7 - 8		1 - 2		3 - 4		5 - 6		7 - 8	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Promoted group	508	380	225	125	37	22	5	2	562	364	163	97	10	13	2	3
Failure group	82	37	41	15	8	2	1	0	91	37	36	15	1	3	1	0
Total	590	417	266	140	45	24	6	2	653	401	199	112	11	16	3	3

Boys:  $X^2 = 0,758$   
 df = 3  
 p > 0,05  
 Girls:  $X^2 = 0,654$   
 df = 3  
 p > 0,05

Boys:  $X^2 = 3,146$   
 df = 3  
 p > 0,05  
 Girls:  $X^2 = 3,241$   
 df = 3  
 p > 0,05

and those who generally speak one of the vernacular languages. ( $p > 0,05$ )

The question required the pupils to indicate the language *mainly* spoken at home. At the time the questionnaires were distributed, it was made clear to the teachers and the principals that the respondents must place only one cross (X) to indicate only the language mainly spoken at home. It is possible that in view of this instruction, pupils who spoke English as well at home, indicated only one of the vernacular languages as the language mainly spoken at home.

In the sample there were 1 444 out of a total of 1 731 (83%) who indicated that they speak English at home. It must be pointed out that, although the remaining pupils (17%) indicated that they generally speak one of the vernacular languages at home, it could safely be assumed that these pupils also speak English at home.

In most Indian homes at the present time, English is more commonly spoken than the vernacular languages. According to Logue<sup>(41)</sup> for most of the Indians, English falls somewhere between a first language and a second language.

The results in Table 4.16 support the suggestion that English is generally spoken in most Indian homes, hence there is no difference between the performance of those who indicated that they speak English at home and those who indicated that they speak one of the vernacular languages at home.

However, no general conclusion could be drawn in view of the fact that the respondents were required to indicate only the language mainly spoken at home. In any case, the frequency with which English is spoken at home was not ascertained.

In retrospect the researcher has come to the conclusion that the item as stated in the questionnaire ought to have been worded differently in order to get more correct information about the extent and frequency of English and Indian languages spoken at home.

TABLE 4.16  
ACADEMIC PERFORMANCE AND LANGUAGE SPOKEN  
AT HOME

	English		Vernacular		Total
	boys	girls	boys	girls	
Promoted group	742	538	176	70	1 526
Failure group	112	52	33	8	205
Total	854	590	209	78	1 731

$$\begin{aligned} \text{Boys: } X^2 &= 1,13 \\ \text{df} &= 1 \\ p &> 0,05 \end{aligned}$$

$$\begin{aligned} \text{Girls: } X^2 &= 0,17 \\ \text{df} &= 1 \\ p &> 0,05 \end{aligned}$$

#### 4.4.7 IQ and Academic performance

Intelligence and school achievement are known to be related.<sup>(42)</sup> In the present study an attempt was made to see if there was any significant relationship between the pupils' IQ and *failure*. The teachers were requested to fill in the IQ scores of pupils on the teachers' questionnaire. In Indian schools the Group Test for Indian South Africans, known as GTISA is used. This test is based on the new South African Test. (NSAGT). The results are set out below. The IQ of 177 pupils in the cohort were not available. These 177 pupils were either not tested for IQ or, on transfer from one school to another, their scores were not indicated on their Cumulative Record Cards.



TABLE 4.17

I.Q. SCORES AND ACADEMIC PERFORMANCE OF BOYS IN THE SAMPLE

	140+	130-139	120-129	110-119	90-109	80-89	70-79	Total
Promoted group	20	51	181	239	216	76	36	819
Percentage	2,4	6,2	22,2	29,3	26,3	9,2	4,4	100%
Failure group	-	1	14	22	44	37	14	132
Percentage		0,75	10,7	17,0	33,4	27,5	10,7	100%

$$X^2 = 65,47$$

$$df = 6$$

$$p < 0,01$$

TABLE 4.18

I.Q. SCORES AND ACADEMIC PERFORMANCE OF GIRLS IN THE SAMPLE

	140+	130-139	120-129	110-119	90-109	80-89	70-79	Total
Promoted group	7	23	93	181	178	90	25	587
Percentage	1,2	3,9	15,6	30,1	29,8	15,0	4,4	100%
Failure group	-	-	3	9	25	19	6	62
Percentage			4,8	14,6	39,8	30,8	10,0	100%

$$X^2 = 26,275$$

$$df = 6$$

$$p < 0,01$$

The results show that in respect of both the boys and the girls there is a very significant relationship between academic performance and IQ at the 0,01 level and even at the more stringent 0,001 level of significance.

The *failure* rate was higher in the lower IQ ranges. For example, in the *failure group* there were 33,4% boys and 39,8% girls with IQ of between 90 - 109. The corresponding percentages for the *promoted group* were 26,3% and 29,8%. In the 80 - 89 IQ range, there were 27,5% and 30,8% boys and girls respectively who failed in the examination, whereas in the *promoted group*, there were only 9,2% boys and 15% girls in this IQ range.

The results show that there were some pupils with high IQ who failed. For example, in the *failure group* there was one boy with an IQ of between 130-139, and 14 boys and 3 girls with IQs of between 120 - 129.

Several studies<sup>(43)</sup> <sup>(44)</sup> <sup>(45)</sup> have shown that in some cases, bright children fail. Ethel Bartlett<sup>(46)</sup> found that in one group of 715 failures at a technical school, 135 pupils had an IQ of between 130-139, and 73 pupils were above 140 IQ with several in the 150s and 160s. All these studies point out that there are factors other than intelligence that could account for bright pupils failing.

However, it must be pointed out that, although there is ample evidence to suggest a positive relationship between academic performance and IQ, there are other variables, notably certain personality traits which have to be taken into account.

#### 4.4.8 General health of the pupil and Academic performance

Has the condition of the health of the pupil any influence on academic performance? To answer this question, the null-hypothesis that the condition of the health of a pupil has no influence on either passing or failing was tested. The results are set out below.

TABLE 4.19

GENERAL HEALTH CONDITION OF THE RESPONDENTS AND ACADEMIC PERFORMANCE

	Good		Average		Poor		Total
	Boys	Girls	Boys	Girls	Boys	Girls	
Promoted group	564	333	339	264	14	10	1 524
Failure group	75	36	65	22	4	1	203
Total	639	369	404	286	18	11	1 727

$$\text{Boys: } X^2 = 5,168$$

$$\text{df} = 2$$

$$p > 0,05$$

$$\text{Girls: } X^2 = 0,859$$

$$\text{df} = 2$$

$$p > 0,05$$

It was found that in respect of both the boys and girls, there is no significant relationship between the general health of the pupils and academic performance at the 0,05 level of significance. In the *promoted group*, more than 58% of the pupils indicated their health as being average and only 2% indicated their health as being poor. In the *failure group*, 43% pupils indicated their health as being average and 3% as being poor.

The findings in this study appear to contradict the findings of other studies<sup>(47) (48) (49)</sup>. Van der Walt<sup>(50)</sup> in a study undertaken in 1962 found that the difference in the health condition between his failure group and control group was significant at the 0,01 level. The possible reasons for the differences between the findings of Van der Walt and the present study may be due to the fact that in the present study the responses to the questions on state of health, were the pupils' opinion of the state of their health and not medical opinions. Apart from this, it is possible that the present study was conducted in a different environment, which may have influenced the results.



degree of accuracy required in this response. Therefore, the responses could not be regarded as reliable.

#### 4.4.8.1 Physical Handicaps

In the case of physical handicaps of the pupils, the results were as follows.

TABLE 4.20

PHYSICAL HANDICAPS AND ACADEMIC PERFORMANCE

B. = Boys

G. = Girls

	None		Speech		Hearing		Sight		Cripple		Other		Total
	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	
Promoted group	675	480	59	7	14	4	150	110	2	1	17	6	1 525
Failure group	110	50	8	2	9	2	13	5	2	0	3	1	205
Total	785	530	67	9	23	6	163	115	4	1	20	7	1 730

Boys:  $X^2 = 21,895$

df = 5

p < 0,01

Girls:  $X^2 = 9,587$

df = 5

p > 0,05

The findings show that in the case of the boys physical handicaps such as speech defects, poor sight, and hearing defects, have a statistically significant effect on academic performance. ( $p < 0,01$ ) However, in the case of the girls the null hypothesis that academic performance is independent of any physical defects was accepted at the 0,05 level of significance. It was found that about 9% of the *failures* among the boys had sight defects and 6,2% had hearing handicaps and 5,5% of them had some speech defects. Among the girls in the *failure group*, 3,3%

had speech defects, 3,3% hearing handicaps and about 8% had sight defects.

It would appear that the incidence of physical handicaps is less among the girls than the boys in this cohort and this might account for the difference.

#### 4.4.9 Absenteeism and Academic performance

Although poor physical health could contribute to poor attendance at school, it was nevertheless decided to see what effects poor attendance at school had on pupil performance. In the table below, details about the number of days the pupils stayed away from school are set out.

TABLE 4.21

NUMBER OF DAYS PUPILS ABSENT FROM SCHOOL AND ACADEMIC PERFORMANCE

	DAYS								Total
	0 - 9		10 - 19		20 - 29		30+		
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
Promoted group	731	528	136	66	26	9	23	5	1 524
Failure group	89	37	45	16	13	6	9	1	205
Total	820	565	181	82	39	15	32	6	1 729

$$\text{Boys: } X^2 = 49,017$$

$$\text{df} = 3$$

$$p < 0,001$$

$$\text{Girls: } X^2 = 30,36$$

$$\text{df} = 3$$

$$p < 0,001$$

The null hypothesis that academic performance is independent of the number of days the pupil was absent from school was rejected with great confidence, ( $p < 0,001$ ). The difference in academic performance between

the *failure group* and the *promoted group* was highly significant for both the boys and girls. In the *failure group*, 31% of the boys and 26,6% of the girls were absent for periods of between 10 - 19 days. The corresponding percentage for the *promoted group* were 14,8 and 10,8%. In the 20 - 29 days period, there were 8,9% boys and 10% girls belonging to the *failure group* as against 2,8% boys and 1,4% girls in the *promoted group*.

#### 4.4.10 Study and Reading Habits and Academic performance

##### 4.4.10.1 Time spent on doing homework

In the table below details about the number of hours spent on homework are presented:

TABLE 4.22

NUMBER OF HOURS SPENT ON HOMEWORK PER WEEK AND ACADEMIC PERFORMANCE

	under 1 hr		1 - 2hrs		2 - 3 hrs		3 - 4 hrs		Total
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
Promoted group	56	22	374	160	334	260	151	166	1 523
Failure group	8	6	87	26	36	21	14	7	205
Total	64	28	461	186	370	281	165	173	1 728

Boys  $X^2 = 19,26$   
 df = 3  
 p < 0,01

Girls  $X^2 = 16,938$   
 df = 3  
 p < 0,01



The null hypothesis that there is no significant difference in the amount of time spent on homework and academic performance was rejected at the 0,01 level of significance. There were more *failures* among both the boys and the girls who devoted between under 1 hour to 2 hours per week to homework than those who devoted between 3 - 4 hours per week.

Pupils were also asked to indicate whether they did homework only when their teachers set homework. The responses showed that in the *failure group*, 59% (90 boys and 32 girls) of the pupils did homework only when it was set by the teachers. It was generally found that among the promoted group, more pupils did homework regularly whether it was set by the teachers or not.

#### 4.4.10.2 Reading Habits

##### (i) Daily Newspapers

Pupils were asked how often they read daily newspapers. They had to indicate whether they read the newspapers "rarely/never", "sometimes" or "regularly". The details are set out below:

TABLE 4.23

THE REGULARITY IN THE READING OF NEWSPAPERS AND ACADEMIC PERFORMANCE

	Rarely/Never		Sometimes		Regularly		Total
	Boys	Girls	Boys	Girls	Boys	Girls	
Promoted group	15	11	396	303	508	293	1 526
Failure group	4	1	80	37	61	22	205
Total	19	12	476	340	569	315	1 731

Boys:  $X^2 = 9,065$   
 $df = 2$   
 $p < 0,05$

Girls:  $X^2 = 3,085$   
 $df = 2$   
 $p > 0,05$

In the case of the boys there is no significant relationship between academic performance and the regularity with which newspapers are read. Therefore the null hypothesis was rejected at the 0,05 level.

In the case of the girls, however, the null hypothesis was accepted at the same level of significance. The results suggest that among the boys who passed, the regular reading of the daily newspapers seems to have a beneficial influence on their academic performance.

It is generally believed that in Indian homes, boys read the newspapers more regularly than girls. Perhaps, the girls do not find the time to devote to daily newspapers because they are often called upon to assist with household chores.

(ii) Magazines and Periodicals

Pupils were asked to indicate the regularity with which magazines and periodicals were read by them. The results are set out below.

TABLE 4.24

REGULARITY IN THE READING OF MAGAZINES AND PERIODICALS AND ACADEMIC PERFORMANCE

	Rarely		Sometimes		Regularly		Total
	Boys	Girls	Boys	Girls	Boys	Girls	
Promoted group	57	18	612	347	249	243	1 526
Failure group	14	4	109	36	22	20	205
Total	71	22	721	383	271	263	1 731

$$\begin{aligned} \text{Boys: } X^2 &= 10,59 \\ \text{df} &= 2 \\ p &< 0,01 \end{aligned}$$

$$\begin{aligned} \text{Girls: } X^2 &= 2,974 \\ \text{df} &= 2 \\ p &> 0,05 \end{aligned}$$



It was found that, as in the case of newspapers, boys who passed read magazines and periodicals more regularly than boys who failed. This was significant at the 0,01 level. On the other hand, there was no significant relationship at the 0,05 level between the regularity with which magazines and periodicals were read and academic performance among the girls.

(iii) Use of the library for borrowing books

Information about the use of library borrowing facilities was also obtained. The following are the details about how often the pupils in the sample used the library for borrowing books.

TABLE 4.25  
THE USE OF THE LIBRARY FOR BORROWING BOOKS  
AND ACADEMIC PERFORMANCE

	Rarely/Never    Sometimes    Regularly						Total
	Boys	Girls	Boys	Girls	Boys	Girls	
Promoted group	130	37	459	200	325	370	1 521
Failure group	16	6	79	27	50	27	205
Total	146	43	538	227	375	397	1 726

Boys  $X^2 = 1,363$   
df = 2  
p > 0,05

Girls:  $X^2 = 5,845$   
df = 2  
p > 0,05

In the case of both the boys and the girls there is no significant relationship between academic performance and the use of the library for borrowing books, ( $p > 0,05$ ). It would seem that the pupils in the sample paid more attention to the formal study of set books which



were prescribed for the examination, than to books borrowed for leisure reading. Perhaps the pupils feel that reading books apart from their prescribed books, does not have any beneficial effect on their performance in the examination.

In a study by De Wet<sup>(51)</sup> carried out among Indian students enrolled at the University of South Africa in 1965, on their leisure time reading habits, it was found that formal studies held a predominant position, averaging 9,4 hours per week, followed by newspaper reading, book reading and reading of periodicals, in decreasing order. The average time spent in reading newspapers was higher than in the case of any other population group, and also differed from the pattern of White and Coloured respondents who gave precedence to books above newspapers. De Wet also found that students seem mostly to buy their own books for leisure reading, or to borrow books from friends, and only about 16% of the respondents may be said to be intensive public library users.<sup>(52)</sup>

#### 4.4.11 Extra-curricular Activities and Academic performance

Pupils were asked to list the number of sporting activities they participated in. It was found that about only 1% of the *failure group* did not participate in any sporting activities. Therefore it was decided not to test the null hypothesis in this case. It was, however, decided to test the null hypothesis that the amount of time a pupil spent in sporting activities had no adverse effect on his academic performance.

The details are set out below.

TABLE 4.26

THE RELATIONSHIP BETWEEN THE NUMBER OF HOURS SPENT ON SPORTING  
ACTIVITIES AND ACADEMIC PERFORMANCE

	B. = Boys				G. = Girls							
	None		Under 1hr		2-3hrs		4-5hrs		6-7hrs		8-10hrs	
	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.
Promoted group	39	103	138	212	332	209	210	60	102	14	97	9
Failure group	9	10	20	28	72	16	27	4	7	1	4	1
Total	48	113	158	240	404	225	237	64	109	15	101	10

Boys  $X^2 = 21,619$   
 df = 5  
 p < 0,01

Girls  $X^2 = 3,769$   
 df = 5  
 p > 0,05

There is a significant relationship between academic performance and the time spent on extra-mural activities among boys. (p < 0,01).

No such relationship was found among girls (p > 0,05). Here again, Indian girls generally tend to spend less time on extra-mural activities than boys. Outdoor games for girls are severely restricted and such activities are usually indulged in during school time.

Boys on the other hand have a wide variety of outdoor games in which they participate after school hours .

The findings show that among the *promoted group* more boys spend about 2 - 3 hours per week on extra-mural activities than the *promoted group* girls. The results suggest that generally the *promoted boys* spend more time on extra-mural activities. The extent to which participation in extra-mural activities *per se* affects academic per-



Harris<sup>(54)</sup> reviewed many studies and found that there is no relationship, though some studies report to the contrary. For example, Lucas<sup>(55)</sup> found that unsuccessful students participated less in social activities than successful students. What most of these studies suggest, is that the way in which participation in non-academic affairs affects academic performance, depends a great deal on several other factors. It depends first on how far pupils can balance their time carefully between the two.

#### 4.4.12 School transfer and Academic performance

It is generally believed that when a pupil is transferred from one school to another, it disrupts the pupils' learning situation. The pupil attending a new school has to adapt himself to new teachers, new methods of teaching, new social environment and new friends.<sup>(56)</sup>

In the present study it was decided to test the null hypothesis that the differences in academic performance between the *failure group* and the *promoted group* were not influenced by the number of times the pupils were transferred from one school to another.

The results are set out below.

TABLE 4.27

NUMBER OF TIMES THE PUPILS TRANSFERRED FROM ONE SCHOOL TO ANOTHER AND ACADEMIC PERFORMANCE Class(i) - Std. VI

B. = boys G. = girls

	No. of times transferred										Total
	None		1		2		3		4		
	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	
Promoted group	273	187	328	231	161	86	97	73	58	29	1 523
Failure group	48	15	43	19	36	15	15	8	3	3	205
Total	321	202	371	250	197	101	112	81	61	32	1 728

$$\begin{aligned} \text{Boys: } X^2 &= 9,322 \\ \text{df} &= 4 \\ p &> 0,05 \end{aligned}$$

$$\begin{aligned} \text{Girls: } X^2 &= 5,535 \\ \text{df} &= 4 \\ p &> 0,05 \end{aligned}$$



TABLE 4.28

NUMBER OF TIMES THE PUPILS WERE TRANSFERRED FROM ONE  
SCHOOL TO ANOTHER AND ACADEMIC PERFORMANCE  
STD. VII - VIII

	No. of times transferred									
	None		1		2		3		Total	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Promoted group	598	355	281	237	25	12	4	-	1 512	
Failure group	96	35	38	23	9	2	-	-	203	
Total	694	390	319	260	34	14	4	-	1 715	

$$\text{Boys } \chi^2 = 6,253$$

$$\text{df} = 3$$

$$p > 0,05$$

$$\text{Girls } \chi^2 = 0,480$$

$$\text{df} = 2$$

$$p > 0,05$$

The null hypothesis was accepted at the 0,05 level of significance. There is no significant relationship between academic performance and the number of times the pupils were transferred from one school to another. However, the results show that:

There were more transfers in the primary school than in the secondary schools;

The frequency of transfers in the primary school stage was greater among the boys than among girls. For example, 20,6% boys and 12,3% girls in the *promoted group* were transferred on two or more occasions as against 26,3% boys and 12,6% girls in the *failure group*;

In secondary schools, the incidence of transfers was negligible. Only 1,9% boys and 0,79% girls in the *promoted group* were trans-

ferred on two or three occasions. In the *failure group*, 4,4% boys and 0,98% girls were transferred on two occasions.

The results in this study appear to contradict other research findings. In several other studies (57)(58)(59) it was found that the more frequent a pupil is transferred from one school to another, the greater is the incidence of *failure*.

The possible reasons for the difference in the findings between this study and other studies could be:

That the information supplied by the pupils about the number of times they were transferred from one school to another could have been unreliable. It is doubtful that all the pupils could remember correctly the number of times they were transferred;

That in Indian schools the Departmental school zoning measures cause block transfers whereby entire class units are transferred from one school to another. In some cases even the teachers are transferred with the pupils. In this way the pupils do not find themselves alone in a strange environment. (60);

That the incidence of transfer from one province to another province is very rare in Indian schools.

It is often difficult to know how many children who stay away from school are really ill, how many are kept at home by their parents and how many are truants. According to Tyreman (61) it would seem that, roughly speaking about 85% of absence is due to illness, about 15% to parents keeping their children at home and 0,74% due to truancy. The present researcher carried out an investigation into



absenteeism and truancy in Indian school in 1975 for the Division of Education, Department of Indian Affairs.<sup>(62)</sup> It was found that truancy and absenteeism in Indian schools were negligible. However, in certain areas like Chatsworth, truancy was caused by socio-economic factors. Working mothers generally cause their daughters to stay at home and look after sick sisters or brothers.

It was also found that mobile grocery and vegetable vendors employ school boys to act as delivery boys and assistants in their mobile business in return for pocket money.

#### 4.4.13 Choice of Courses and failure

From the results obtained, it was found that the pupils in both the *failure* and the *promoted* groups had indicated that in the choice of a field of study, they were also guided by the wishes of their parents as well as by the guidance given to them by their schools. Therefore it was decided not to test for significance. However, it was found that 62% of the boys and 69% of the girls in the promoted group exercised their own choice in the selection of a field of study. In the *failure group* the corresponding percentages were 58,7% and 56,9%. Only 10% of the boys and 13% of the girls who had failed indicated that they were forced to take the courses against their choice. The rest of the pupils had indicated that they were guided by their parents and teachers in the choice of subjects and also the grade in which to take the subjects

#### Subject failure

In Tables 4.29 and 4.30 the results in individual subjects taken by the pupils on either the Higher Grade or the Standard Grade are presented. It will be seen that a comparatively higher percentage of pupils who took mathematics and biology on the Higher Grade failed



than in any other subject. Of the pupils who took mathematics on the Higher Grade 17,8% failed the subject while 4,2% of the pupils failed mathematics on the Higher Grade, but their results were converted to a pass on the Standard Grade. In biology 6% of the pupils failed on the Higher Grade, and 3% failed on the Higher Grade, but their results were converted to a pass on the Standard Grade.

On the other hand the results in the subjects taken on the Standard Grade show a higher percentage of pupils failing in the subjects than in the corresponding subjects taken on the Higher Grade. The highest percentage of *failures* was in mathematics (42%), economics (40%), home economics (40%) and in biology (22%).

It was also found that in the *failure group* about 30% failed in one subject (plus the aggregate), 44% failed in two subjects and 25% failed in three or more subjects. In the *promoted group* 25,6% failed in one subject only. (If pupils fail in more than one subject, they fail the whole examination).

It would appear that the percentage of pupils failing in subjects taken on the Standard Grade is much higher than in the subjects taken on the Higher Grade. The possible reason perhaps is that pupils taking a subject on the Higher Grade have two chances of passing. If they fail to pass on the Higher Grade, their *failure* on the Higher Grade is converted (subject to certain minimum marks requirements) to a pass on the Standard Grade. This is not possible when a subject is taken on the Standard Grade. A pupil either fails or passes in this grade. It is also possible that the difference in standard between the Higher grade and the Standard grade examination papers does not differentiate adequately.

TABLE 4.29

RESULTS OF THE SUBJECTS TAKEN ON THE HIGHER GRADE, BY THE STD VIII SAMPLE PUPILS IN 1974

	No. entered	No. passed	%	No. convert- ed to Std. Grade	%	No. failed	%
English	1 730	1 672	97	8	0,47	50	2,53
Afrikaans	89	88	99	-	-	-	-
Biology	1 470	1 345	91	38	3,0	87	6,0
Physical Science	429	416	97	2	0,47	11	2,53
Mathematics	1 305	1 023	78	56	4,2	226	17,8
History	672	631	94	15	2,2	26	3,8
Geography	472	440	93	8	1,7	24	5,3
Accountancy	858	829	97	6	0,70	23	2,30
Economics	110	105	95	-	-	5	5,0

TABLE 4.30

RESULTS OF THE SUBJECTS TAKEN ON THE STANDARD GRADE BY  
THE STD VIII SAMPLE PUPILS IN 1974

	No. entered	No. passed	%	No. failed	%
English	1	1	100	-	-
Afrikaans	1 637	1 531	94	106	6
Biology	23	18	78	5	22
Physical Science	32	31	94	1	6
Mathematics	81	47	58	34	42
History	6	6	100	-	-
Geography	45	44	98	1	2
Accountancy	590	537	91	53	9
Economics	10	6	60	4	40
Business Economics	210	205	97	5	3
Typing	341	311	91	30	9
Home Economics	15	9	60	6	40
Housecraft	40	40	100	-	-



#### 4.4.14 Teachers' assessment of Pupils' Behaviour Problems

It was stated earlier that there are numerous studies showing that factors other than ability influence academic performance. Miller<sup>(63)</sup> cites several studies to illustrate that such behaviour problems as lack of interest, lack of perseverance, nervousness and social inadaptability adversely affect academic performance.

In the present study, the following behaviour problems were considered in respect of academic performance: nervousness, withdrawn, restlessness/inattentive, lack of concentration and co-operativeness.

Teachers were asked to rate the above behaviour problems in respect of the pupils on a three-point scale as follows: "certainly applies", "applies somewhat", and "doesn't apply".

Each item was given a weighting as follows: "certainly applies" (1), "applies somewhat" (2) and "doesn't apply" (3).

The overall response of the teachers to a particular item was measured by a score which is the mean of the sum of the weights given to an item. The calculation of the weighted mean was shown earlier in this chapter. The results are shown in the table below:

TABLE 4.31  
WEIGHTED MEAN

Behaviour problem	Promoted Group		Failure Group	
	Boys	Girls	Boys	Girls
Nervousness	2,7	2,6	2,7	2,6
Withdrawn	2,6	2,6	2,5	2,4
Restlessness	2,6	2,7	2,4	2,5
Lack of concentration	2,6	2,6	1,9	1,7
Cooperativeness	2,3	1,5	2,1	1,9

From the above table it can be seen that the behaviour problems as described by the teachers, did not differ materially in the *promoted group* and the *failure group* or between boys and girls.

In respect of the following behaviour problems, teachers' observations were rated as average: nervousness, withdrawn and restlessness. In the case of "lack of concentration", teachers' ratings were average for boys and girls in the *promoted group* but it was rated poorly in respect of boys and girls in the *failure group*. The weighted mean was 1,9 and 1.7 for the boys and girls respectively.

When it came to "co-operativeness", only the boys in the *promoted group* and the *failure group* were rated as average, but the girls in both the groups were rated as being highly in "co-operativeness". The weighted mean was 1,5 in the *promoted group* and 1,9 in the *failure group*.

#### 4.4.15 Personality Traits and Academic Performance

The fact that individual differences in intelligence cannot account for all or even the major part of the differences in scholastic achievement, suggests that personality variables may play a significant role in determining performance in schools.<sup>(64)</sup> Several studies<sup>(65)(66)(67)</sup> show some relationship between academic performance and personality variables. In this study the following personality traits "initiative and zeal, self-confidence, perseverance, reliability and social adaptability were assessed."

Teachers were asked to rate the above traits by placing a cross (X) in the appropriate space. The ratings were on a five-point scale as follows:

very weak(1), weak(2), average(3), good(4), outstanding(5).

The teachers' responses were assessed by the use of the weighted mean method. The results are set out below:

TABLE 4.32  
WEIGHTED MEAN

Personality trait	Promoted group		Failure group	
	Boys	Girls	Boys	Girls
Initiative & zeal	3,2	3,5	2,7	2,6
Self-confidence	3,2	3,5	3,3	3,0
Perseverance	3,1	3,4	2,8	2,4
Reliability	3,4	3,5	3,0	2,9
Social adaptability	3,1	3,5	3,0	3,0

The closer the weighted mean ( $\bar{X}$ ) is to 5, the more the particular personality trait was observed in the pupils. The results in the above table show that:

In respect of the initiative and zeal, the boys and girls in the *promoted group* were rated as being between average and good. This trait was rated as being between weak and average for the boys and girls in the *failure group*;

Perseverance was rated as being average in the *promoted group* but this trait seems to be weaker in the *failure group*;

In respect of self-confidence, social adaptability and reliability, there does not appear to be any material difference between the *promoted group* and the *failure group*, nor was there any great difference between boys and girls in this respect.



In a study cited by Miller<sup>(68)</sup>, headmasters of English grammar schools were asked to give their reasons for pupil inability to succeed in university studies. Among the reasons, the following were included:

Lack of ability and initiative	(6%)
lack of perseverance	(6%)

While it may not be clear in the present study, to what extent these traits individually and collectively affect academic performance, there can be little doubt that some of the personality traits could have an important influence on academic performance.

#### 4.4.16 Pupils' Attitude to School

Pupils in the cohort were asked to indicate their reasons for attending school. The results are set out below.

TABLE 4.33

REASONS FOR ATTENDING SCHOOL

	Promoted group		Failure Group	
	Boys %	Girls %	Boys %	Girls %
Like school	63,5	71,0	66,9	77,4
Forced to attend	5,4	4,4	13,7	5,6
Strong desire to succeed in life	11,1	4,5	5,3	5,0
Dont know	20,0	20,1	14,1	12,0

The results show that more than two-thirds of the pupils in the

cohort like school. Approximately 5% of the pupils in both the *failure group* and the *promoted group* indicated that they were forced to attend school, except for the boys in the *failure group* where the percentage is 13,7. About 20% of the boys and girls in the *promoted group* indicated that they don't know why they attend school. In the *failure group* the corresponding percentages are 14,1% boys and 12,0% girls. An average of 5,7% of the pupils indicated that they have a strong desire to succeed in life. It must be pointed out that the pupils who had indicated that they like school could also have a strong desire to succeed in life.

REFERENCES

1. Kerlinger, F.N.: cited by Behr, A.L. *Methods and Techniques of Educational and Psychological Research*. Van Schaik, Pretoria, 1973 p.10.
2. Behr, A.L., op. cit., p.10.
3. Good, C.V. and Skates, D.E.: *Methods of Research, Educational, Psychological, Sociological*. Appleton - Century - Crofts N.Y. 1954 p.256.
4. Behr, A.L., op cit., p.10.
5. Platt, W.J.: *Research for Educational Planning - Notes on Emergent Needs*. UNESCO, International Institute for Educational Planning. Paris 1970 p.9.
6. Behr, A.L., op. cit., p.11.
7. Ibid., p.11.
8. Department of Indian Affairs - (Division of Education) Circular No. 28 of 1972 File 19/15/6/2.
9. Sugden, M.A.: "Chatsworth; Social and Economic Charistics of Population." *Journal of the University of Durban-Westville* Vol. 1. No. 2 1972, p.70.
10. Borg, W.R.: *Educational Research - An Introduction*. Longmans, new York, 1969 pp.171-174.
11. Ibid., pp.171-174.
12. Department of Indian Affairs - (Division of Education) *Report 1 January to 31 December 1974 Annexure C*.
13. Behr, A.L., op. cit., pp.72-73.
14. Downie, N.M. and Heath, R.W.: *Basic Statistical Methods*. Harper & Row, New York 1965 pp.160-165.
15. Behr, A.L., op.cit., p.11.
16. Ferguson, G.A.: *Statistical Analysis in Psychology and Education*. Mc Graw - Hill & Co. New York 1976, p.187.
17. Behr, A.L., op. cit., p.75.
18. Wall, W.D. et al., op. cit., p.30.
19. Ibid
20. Van der Walt, N.: *Die Vraagstuk van Druiping op Skool - 'n Geskiedkundige Vergelykunde Studie*. Doctor Philosophiae, 1962 pp.98-99.
21. Miner, Betty: "Sociological Background Variables Affecting School Achievement" *Journal of Educational Research*. Vol.1



22. Chopra, S.: "Family Size and Sibling Position as related to measured intelligence and Academic achievement".  
*The Journal of Social Psychology*. Vol. 70. 1966 pp.133-137.
23. Glass, D.V.: *Social Mobility in Britain* . Routledge London, 1954.
24. Banks, Olive and Finlayson: *Success and Failure in the Secondary School - An Interdisciplinary Approach to School Achievement*. Methuen and Co. Ltd. London. 1973 p.92.
25. Miner, Betty, op. cit., p.373.
26. Banks and Finlayson, op. cit., p.94.
27. Ibid
28. Newson, J.: "Child Rearing Practices" *Educational Research in Britain - No. 3* Ed. Butcher, H.J. and Pont, H.B. University of London Press 1973, pp.57-59.
29. Behr, Dorothea: "The Study of the Occupational Preferences and Values of a Group of First-Year Indian Students at the University College of Durban. *Journal of the University of Durban-Westville*. Vol. 1 No. 2 1972 p.4.
30. Sampson, E.E.: "Birth Order, Need Achievement and Conformity,"  
*Journal of Abnormal Psychology* Vol. LXIV, 1962, pp.155-159.
31. Schachter, S.: "Birth Order, Eminence and Higher Education."  
*American Sociological Review* Vol. XXVIII, 1963 p.757.
32. Miner, Betty, op. cit., p.375.
33. Hodges, A. and Balow, A.: "Learning Disability - Relation to Family Constellation." *Journal of Educational Research* Vol. 55 1969 pp.41-42.
34. Chopra, S., op cit., pp.133-137.
35. Hodges, A. and Balow, A., op. cit., pp.41-42.
36. Miner, Betty, op cit., p.374.
37. Sampson, E.E., op cit., pp.155-159.
38. Kellmer Pringle, M.L.: *Able Misfits - The Educational and Behaviour Difficulties of Intelligent Children*. Longmans Group Ltd. London 1970 pp.108-109.
39. Ibid., p.79.
40. Stice, G.et al. cited by Miner, Betty op. cit., p.376.
41. Logue, G.D.: "An Investigation into the Suitability of the South Group Test for Indian Children in Durban." Masters' Dissertation, U.N. 1954 p.77.

42. Butcher, H.J. cited by Naylor F.D.: *Personality and Educational Achievement* John Wiley and Sons, Sydney, 1972 p.10.
43. Kellmer Pringle, M.L., op. cit., p.74.
44. Ekstrom, R.B.: "Experimental Studies of Homogenous grouping" *School Review* No. 69 1969 pp.216-226.
45. Bartlett, Ethel: "The Intelligence School Failure" *Review in Times Educational Supplement* 21 December 1962.
46. Ibid
47. Birch, N.G. and Gussow, J.D.: *Disadvantaged Children - Health, Nutrition and School failure.* Harcourt Brace, New York, 1970, p.3.
48. Schonell, F.: "The Slow Learning Child". *The Australian Journal in Education of Backward Children*, Nov. 1956 p.61.
49. Van der Walt, N., op cit., pp.197-198.
50. Ibid
51. De Wet, R.: "Vryetydse Leesgewoontes Van Indiërstudente" *Journal of the University of Durban-Westville.* Vol. 1 No. 2 1972 p.79.
52. Ibid
53. Harris, D.: "Factors affecting College Grades - A review of literature" *Psychology Bulletin* No. 37, 1970 p.52.
54. Ibid
55. Lucas, C.J. and Kelvin, R.P.: "Mental Health and Student Wastage: *British Journal of Psychiatry* No. 112. 1946, p.484.
56. Van der Walt, N., op. cit., pp.139-147.
57. Association for Supervision and Curriculum Development. - Editorial. *Year Book 1958.* A look at continuity in the School Programme. P.70.
58. Malherbe, E.G.: *Onderwys en die Armblanke* Doel 111, p.183.
59. High School dropouts: Research Division of the National Education association of the United States, Pamphlet, p.8.
60. Department of Indian Affairs- (Division of Education) : Circular No. DO of 1974. File 19/29/6/4.
61. Tyreman, M.J.: "Absence from School and its Treatment" *The Slow Learning Child.* Vol. 12 No. 2 Nov. 1965. pp.113-118.
62. Department of Indian Affairs - (Division of Education) File No. 19/15/6/2.

63. Miller, G.N.: *Success, Failure and Wastage in Higher Education*. George Harrap, London. 1970 pp.10-18.
64. Naylor, F.D.: *Personality and Educational Achievement* John Wiley and Sons. Sydney 1972 pp.4-7.
65. Rushton, J.: The Relationship between Personality Characteristics and School Success in eleven year old children." *British Journal of Educational Psychology*.
66. Matlin, A.H. and Mendelsohn, F.A.: "The relationship between Personality and Achievement variables in the Elementary School." *Journal of Educational Research* Vol.58 No.10. 1965 pp.457-59.
67. Taylor, R.G.: "Personality Traits and Discrepant achievement". *Journal of Counselling Psychology*. No.11 1964 pp.76-78.
68. Miller, G.W., op. cit., pp.10-18.



## CHAPTER FIVE

### 5. GENERAL CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 LIMITATIONS OF THE PRESENT STUDY

Before summarizing the main findings, it is necessary to draw attention to some of the limitations of the present study. In the first place the study of *failure* at the Standard VIII level was based on the pupils' performance in internal examinations. Although the use of such a criterion can be justified for the purpose of studying *failure per se*, yet it had the disadvantage of differing standards from school to school. In order to compare academic performance, an external examination common to all the pupils in the sample, would have been more reliable than an internal examination.

In the second place the role of the school in academic performance was not considered. It is within the school context that *success* and *failure* take place. Lafferty<sup>(1)</sup> in investigating high school *failure* in Texas, came to the conclusion that only 24% of the *failure* rate was caused by low ability of the pupils, but the school was to blame for 76% of the *failure* rate. There is growing evidence that a pupil's achievement is more immediately and strongly affected by teachers' attitudes towards him.<sup>(2)</sup> Good schools can offset the effects of a poor home, but bad schools can have harmful effects, particularly on children of moderate ability.<sup>(3)</sup>

However, any consideration of the school itself is outside the scope of this study.

Thirdly, the role of parents in the academic performance of their children was also not considered. The role of the parents in the pupils' academic performance is said to be extremely important.<sup>(4)</sup>

Behr<sup>(5)</sup> says that achievement motivation is related to certain kinds of parent-child interactions. It has been found, for example, that "where home discipline is accepting and love-orientated, there is a high need for achievement. On the other hand, the underlying causes for under-achievement in youngsters have their origin in hostility and resentment of parental authority perceived as restrictive and unjust." There is general agreement that parents' use of approval or disapproval, including reasoning and explanation, coercion-including physical punishment, are best suited for inducing the child's achievement motivation.<sup>(6)</sup> An investigation of the parental interaction is beyond the limits of this study. In the summary of the main findings and their implications, these limitations should be borne in mind.

## 5.2 DISCUSSION OF THE FINDINGS

In this section the main findings of the present study will be summarised. In the previous chapter, it was found that certain variables are significantly related to academic performance of both boys and girls, while some others appeared to show no significant relationship to academic performance of either boys or girls, and a few variables influenced the performance of girls differently from those of the boys.

In the discussion of the summary, the following procedure is adopted:

- (i) The variables examined will be divided into two broad categories, viz. variables within the pupils and variables extraneous to the pupils;
- (ii) The variables within the pupils which had common influence on academic performance of both boys and girls will be discussed, followed by a discussion of the variables within the pupils, which influenced the performance of the girls



differently from those of the boys and those variables which seemed to have no significant relationship to academic performance of both boys and girls.

- (iii) Finally the variables extraneous to the pupils will be considered, first by examining those variables which had common influence on the academic performance of both boys and girls, followed by those variables which influenced the performance of the girls differently from those of the boys, and finally those variables which seemed to have no influence on the academic performance of either boys or girls.

#### 5.2.1 Variables within the Pupils

It was found that certain variables which may be regarded as being within the pupils themselves relate significantly to the academic performance of both boys and girls. These variables are sex, religion, study habits and absenteeism. These appear to have common influence on both boys and girls. There were some variables which influenced academic performance of boys and girls differently. These include birth order, physical handicaps, reading habits and extra-curricular activities.

There were variables which showed no significant relationship to academic performance of either the boys or girls. These were health and the language spoken at home.

##### 5.2.1.1 Variables which relate significantly to academic performance of boys and girls

In respect of the sex of the pupils, it would appear that there is a significant relationship between sex and academic performance



(see Table 4.7). It was found that girls perform better than boys. These findings agree with other research findings<sup>(7) (8) (9)</sup>. It is possible that the girls are more conscientious than boys. Moreover girls are, on the average, more fluent than boys and possibly, the higher fluency could be an important factor in academic performance.

Apart from the possible reasons discussed earlier, research work by others have shown that girls are, on the whole, more fluent than boys. Fluency is being defined here as the ability to think, speak, read or write quickly.<sup>(10)</sup> This could be an important factor in academic performance. However, in the present study the difference in fluency between girls and boys was not investigated. It may well be that further research in this direction could provide interesting information.

Religion was found to be significantly related to academic performance (see Table 4.13). Although children of the Islamic religion in the sample tend to do better than pupils of the other two religions, i.e. Hindu and Christian, the results must be treated with caution. A more salient influence may stem from the cultural differences among members of different groups. Gross<sup>(11)</sup> found in his study of two Jewish groups, that within the same religious groups, subtle differences in cultural traditions had a profound effect on academic performance.

As regards IQ it was found to be significantly related to academic performance (see Table 4.17). It is generally believed that intelligence is of great importance in all scholastic work. According to Lavin<sup>(12)</sup> intelligence is without doubt associated with high

in those vocations to which it is directly relevant, it accounts for no more than about half the variations in performance.

In respect of study habits, it was found that boys and girls who devoted more time to homework did significantly better in the examination than those who devoted between 1 - 2 hours per week to it (see Table 4.22). Moreover it was found that in the *promoted group* more pupils did homework, whether their teachers set homework or not. In a study by Banks and Finlayson<sup>(13)</sup> which dealt with boys only, it was found that the successful boys spent significantly more time on homework than did the unsuccessful boys. They found that the actual conditions under which homework was carried out did not have a significant bearing on *success* and *failure*. What seemed to be more important was the internal motivation of the boy himself.

The findings in respect of absenteeism (see Table 4.21) are in agreement with other research findings which show that poor attendance is associated with poor academic performance.<sup>(14) (15)</sup>

As was pointed out in the previous chapter, a certain degree of absence from school can be attributed to ill health, but an investigation carried out by the Division of Education in 1975, revealed that pupils are being kept at home by their parents to look after younger brothers and sisters. Socio-economic factors may also be associated with poor attendance. In the investigation mentioned above, it was found that where both parents were working, the incidence of truancy and absenteeism was quite high.

The pupils in the present investigation were not subject to compulsory school attendance. In Indian education, compulsory school attendance applies to "every child who in 1973, or thereafter 1...

fully enrolls in Class (i)..... and such child shall continue to attend school regularly until the end of the year in which he reaches the age of fifteen years."<sup>(16)</sup>

#### 5.2.1.2 Variables which differently influenced the academic performance of boys and girls

The findings in respect of physical handicaps (sight, speech, etc.) show that the incidence of physical handicaps is greater among boys than girls in the sample. (see Table 4.20) This possibly explains the significant relationship found between this variable and academic performance among boys.

As regards reading habits, it was found that regularity in the reading of daily newspapers and magazines was significantly related to academic performance among boys, but it was not so with the girls. (see Tables 4.23 and 4.24) It would appear that pupils who read newspapers and magazines regularly tend to perform better academically. The findings suggest that possibly Indian girls find less time for leisure than boys. Girls are often required to help at home and even tend to their younger brothers and sisters.

Participation in extra-curricular activities also related significantly to the academic performance of boys, but it had not much influence on girls. It was found that boys generally spend more time on extra-curricular activities than girls. (see Table 4.26) This suggests that girls have less opportunities for extra-curricular activities - especially sporting activities. Boys generally participate in a variety of sporting activities both in and out of school. Girls also have less time to devote to sport since they are often called upon to assist with household chores.



These findings are in accord with those of Lucas<sup>(17)</sup> who found a significant relationship between performance and the amount of time spent on sport and other extra-curricular activities. However, Lucas found no sex difference with this variable. The possible explanation is that, apart from lack of time and fewer sporting opportunities, Indian girls are still conservative in their attitude to participation in out-door sporting activities. However, girls devote much time to household activities such as sewing, knitting, cooking etc. These may as well be a compensating factor for the lack of extra-curricular activities.

Birth order appears to be significantly related to academic performance (see Table 4.14). It was found that generally, first-born boys perform better academically than later-born children. These findings are in accord with other research findings<sup>(18) (19)</sup>. The possible explanation would be that first-born children are at an advantage in that their mothers have more time for shared activities. In Indian homes, first-born boys receive much attention from their parents. Parents also tend to expect more from first-born boys than from first-born girls. The aspirations and expectations for the first-born boys are also greater than for first-born girls. These may be possible reasons for first-born boys performing better than first-born girls.

#### 5.2.1.3 Variables which appear to have no significant relationship to the Academic performance of both boys and girls

As regards the health of the pupils, there appears to be no significant relationship to academic performance. (see Table 4.19) The findings are contrary to generally held views that the condition of a pupil's health could affect academic performance. Poor health

is said to be related to poor academic performance.<sup>(20)</sup> However, the findings of this study in respect of health have to be treated with reservation. It was pointed out that the pupils' responses in this regard cannot be taken as reliable. There is thus need for further exploration in this area.

In respect of the use of the library, it was found that there is no significant relationship between academic performance and the use of the libraries for borrowing books. (see Table 4.25) The possible explanation is that pupils pay more attention to prescribed set books than to borrowing books for leisure reading. Perhaps the pupils believe that reading books other than those prescribed, is not rewarding in the examination.

#### 5.2.1.4 Teachers' assessment of pupils' behaviour and personality traits

It was found that teachers' assessment of observed behaviour problems, viz. nervousness, withdrawn, restlessness, lack of concentration and cooperativeness, did not differ materially in the *promoted group* and the *failure group* or between boys and girls. It would appear that teachers did not readily relate the listed behaviour problems specifically to school work and thus were unable to distinguish these behaviour problems in respect of the *promoted* and the *failure group*. (see Table 4.31)

As regards personality traits, it was found that teachers' observations of the listed traits were generally rated average in respect of both the *promoted group* and the *failure group* as well as for boys and girls. However, teachers' observations in respect of initiative and zeal and perseverance were noted as

pupils who failed. (see Table 4.32)

The writer has the impression that the accuracy of the teachers' judgement in assessing pupils' behaviour problems and personality traits is doubtful. Therefore the results in this respect have to be treated with caution especially when the assessments centre around average.

The nature of the relationship between personality traits and academic performance has been the subject of numerous studies.<sup>(21) (22) (23)</sup> This is another area among Indian pupils which needs further research.

#### 5.2.1.5 Pupils' attitude to school

It was found that pupils generally like school. However, among the boys who failed about 13,7% indicated that they were forced to attend school. (see Table 4.33)

#### 5.2.2 Variables extraneous to the Pupils

Attention will now be paid to those variables which are extraneous to the pupils. These include: fathers' occupation, parents' level of Western education, family income, material comforts at home, family size, language commonly spoken at home, school transfer and choice of study direction.

##### 5.2.2.1 Variables which relate significantly to academic performance of boys and girls

In the analysis of the results in the previous chapter, it was found that significant relationship was found between the academic performance of both boys and girls and parents' level of Western education. (see Table 4.10) This relationship was more significantly re-



lated to the mothers' level of Western education than the fathers' level of education. The findings are in line with other research findings. (24) (25)

This is a welcome sign. As more and more girls attain a high level of education, their roles as mothers influence the home as an important agency in the education of the child. It is often said that when you educate a man you educate an individual, but when you educate a woman, you educate a whole community.

#### 5.2.2.2 Variables which differently influenced the academic performance of boys and girls

Family income appeared to be significantly related to the academic performance of boys but there was no such relationship between the academic performance of the girls and family income. (see Table 4.11) It is quite surprising to find that the performance of girls is in no way affected by family income. However, the information supplied by the pupils is open to doubt, as the difficulty in obtaining accurate income figures is well known.

Moreover, the pupils may not know exactly what the family income is. Further research is necessary to relate income with such material comforts as the possession of own car, television, radio etc. and academic performance.

#### 5.2.2.3 Variables which appear to have no influence on academic performance of both boys and girls

The following variables appear to have no significant relationships to academic performance of both boys and girls: fathers' occupation,

having one's own room at home, family size, language commonly spoken at home and the number of times pupils were transferred from one school to another.

As regards fathers' occupation, the present findings (see Table 4.8) are not in agreement with previous findings which show a positive relationship between academic performance and fathers' occupation. The possible explanation for this difference may lie in the fact that occupation in the present study was very narrowly categorised. This could have masked any significant relationship that might possibly have existed.

It is the writer's contention that occupation *per se* is not the overriding factor. Although a high status occupation is linked to better material comforts at home, it is parental love, warmth, inspiration or family discussion, that may have a more marked influence on pupil performance - than mere high occupational status. An interesting finding in Germany, carried out by Burger<sup>(26)</sup> between 1964-1966 found that the incidence of *failure* among children in Classes 8 - 11 in Bavaria was greater among doctors' children than any other group. It was found that the proportion of *failures* was as follows: children of doctors 53,9%, children of other graduates 45,8%, children of skilled workers 39,6% and children of unskilled workers 32,5%.

The hypothesis that having one's own room at home is significantly related to academic performance was not upheld in the present findings. (see Table 4.12) It is safe to suggest that very few Indian homes can afford to allocate a room to a single child. However, the findings indicate a trend that those pupils who do have their own room

perform better than those who do not have their own rooms.

As regards family size, there was no significant relationship between this aspect and academic performance (see Table 4.15). These findings appear to be in general agreement with other findings, notably those of Banks and Finlayson<sup>(27)</sup> who found that family size was unrelated to academic performance.

In respect of language commonly spoken at home, it was found that there is no significant relationship between academic performance and the language commonly spoken at home, (see Table 4.16) It was hoped to find to what extent the pupils' academic performance is influenced by the vernacular being spoken at home. According to Ramphal<sup>(28)</sup>, very often the English "used by elders in the home is crude and elemental. Literal translations of the mother tongue into English are common, resulting in distortions of idiom."

The results in the present study suggest that very little vernacular is presently spoken at home and the standard of English spoken in Indian homes has improved since Ramphal's study which was carried out nearly fifteen years ago. The educational level of the Indian community has improved considerably since then.

As regards school transfer, there is no significant relationship between academic performance and the number of times the pupils were transferred from one school to another. (see Table 4.27)

Although these findings are contrary to other research findings, (29) (30) it was pointed out in the previous chapter that the incidence of transfer from one school to another is minimal in view of the fact that Indians are a settled community in Natal. Even with resettlement in new housing units transfer generally takes place



once only. When pupils are transferred from primary schools to secondary schools, this is done by moving a whole class unit, thus causing very little disruption.

In respect of choice of study direction, the findings suggest that pupils *are* given the opportunity to choose a particular direction. However, it was found that a fairly high percentage of pupils fail in the Standard Grade. A plausible reason could be that either the Standard Grade does not adequately cater for differentiation or pupils are underachieving.

There appears to be an urgent need for a full investigation into the degree of differentiation not only in teaching methodology but also in the matter of differentiation of standards in the Higher Grade and Standard Grade examinations.

### 5.3 CONCLUSION

Although a few deviations were found, in general the findings in this study tend to substantiate previous research results. They do provide a systematic picture of some of the variables which affect academic performance. It is clear from the results that the differences in school achievement are too complex to attribute to a single cause; rather these differences are the final outcome of a long chain of unique, individual events. However, the findings of this study provide a framework within which the complex problem of *failure* can be conceptualised. It is hoped that the findings will begin to answer some of the questions posed in the opening chapter.

#### 5.4 RECOMMENDATIONS

In the light of the present findings, the following recommendations are suggested:

##### 5.4.1 The selection function of the Standard V Examination

The findings of this research throw some doubt on the predictive function of the Standard V examination. At present pupils are channelled into the Academic Course or into the Practical Course on the results of the Standard V examination. As stated elsewhere, the Practical Course is intended for pupils of below average intelligence who cannot cope with the normal academic course. This study has demonstrated that a proportionately large number of average and above-average pupils are promoted into the Practical Course.

It is therefore suggested that the two examinations, viz. half-yearly and the end of the year examinations, should not be the sole criteria for classification. A continuous process of evaluation of a pupil's progress through out the Standard V year is recommended. Such factors as IQ, ill-health, interest and aptitude should be taken into account. All aspects of the work done during the course of the year, including assignments and projects should have an important place in the overall assessment of the pupil's progress. When there is a disparity between a pupil's measured intelligence and his rate of progress, the cause should be investigated and suitable remedial measures taken.

It is further recommended that a Guide on Testing and Evaluation based on similar lines as the one prepared by the Cape Education Department<sup>(31)</sup> be compiled for principals and teachers. This Guide should also contain guidelines for classification, promotion and re-



#### 5.4.2 The Practical Course

It was found that after the initial classification at the end of Standard V, the practice of sifting goes on up to the Standard VIII level. As a result more and more pupils of average and above average ability are being channelled into the Practical Course. This sifting process can be abused by schools which may adopt a stringent process of sifting in order to attain a good pass rate in the ultimate Senior Certificate examination.

It is therefore recommended that (i) once the pupils have been classified on the basis of their overall performance at the Standard V level, no further classification in the Practical Course should be allowed as a matter of policy. Where any doubt exists the pupils should be permitted to continue with the normal Academic Course. A pupil who has been clearly identified as being suited to the Practical Course after being subjected to a battery of tests and assessments, then, after consultation with parents, the pupil should be placed in the Practical Course.

(ii) In order to allow for uniform standards and to prevent schools from adopting a stringent sifting process, a system of question banks should be considered. Many research workers in this field consider question banks to be the most promising moderating device. In short, this implies the construction of a large number of test questions in each subject. In order to be able to survive a standardization process, the questions must be objective or at least semi-objective. They are screened, pre-tested and then tried on a representative sample of pupils to ascertain difficulty levels. Satisfactory questions are then filed in a "bank" and subsequently used either by individual schools to draw up examination questions which teachers believe to



be valid for their pupils or for use by examining bodies to moderate group standards in schools using a system of internal assessment.

According to a Schools Council paper on Item Bank<sup>(32)</sup> the question or item banks are used to classify achievements which are universally applicable so that teachers may be made aware of what it is they are testing and why. The Human Sciences Research Council has already compiled item or question banks in collaboration with the Education Departments of the Transvaal, Natal, the Orange Free State and the Cape Province.<sup>(33)</sup>

The object of compiling the item bank was to supply schools with an objective measuring instrument to test their standards if they do not set external Senior Certificate examinations.

Initially the Department of Indian Affairs can work in collaboration with the Human Sciences Research Council to build up its own question bank. Schools can be informed about the procedure to draw questions from the question bank. Questions can be stored in a Departmental centre and once proper records are maintained it is possible to avoid teachers using the same set of questions over and over again in a particular school.

#### 5.4.3 Underachievement

The proportionately large number of average and above-average ability pupils in the Practical Course, suggests that these pupils are underachieving. Although underachievement as an educational phenomenon cannot be easily eradicated, its extent can be lessened. Such factors as poverty, lack of motivation, discordant atmosphere at home, moral and spiritual weakness on the part of one or more parents, may be contributory factors in underachievement. Of importance also

are material comforts at home which enrich the life of a child from the more well-to do homes and are denied his less fortunate classmates. By making full use of audio-visual educational aids and by arranging occasional excursions, the school can do much to compensate for the lack of these resources. The ability of the schools to provide learning experiences which motivate the pupils would appear to be of special consequence for those pupils who are not motivated in any other way. Thus by stimulating interest and enriching the school life of a child, the school can help him to develop and cultivate the frame of mind which is conducive to progress at school.

#### 5.4.4 Differentiation between Higher Grade and Standard Grade

It was shown that *failure* in the subjects taken on the Standard Grade is comparatively high. In order to determine the degree of differentiation between the Higher Grade and the Standard Grade, it is suggested that the Division of Indian Education carry out a full investigation into this aspect. At present a subject taken on the Higher Grade carries 400 marks and a subject taken on the Standard Grade carries 300 marks. A pupil has to obtain 33 $\frac{1}{3}$ % or (133 out of 400 marks) in individual subjects to pass on the Higher Grade and 33 $\frac{1}{3}$ % (100 out of 300 marks) to pass on the Standard Grade. A *failure* in a subject taken on the Higher Grade (except for Afrikaans second language) is recognised as a pass on the Standard Grade provided a minimum of 25% (or 100 marks) is obtained in that subject. This suggests that 25% on the Higher Grade is equal to 33 $\frac{1}{3}$ % on the Standard Grade. It should be pointed out that everything else being equal it is easier to obtain 100 marks out of 400 than 100 marks out of 300 marks. It may be argued that the subjects on the Higher



Grade are examined at a higher level than the subjects on the Standard Grade. But a preliminary investigation by the Education Planning Section into the degree of differentiation in certain subjects examined on the Higher Grade and Standard Grade in a recent Senior Certificate examination, showed that the degree of differentiation was minimal. (34)

There is an urgent need for a thorough investigation, not only into the degree of differentiation but also into the extent of differentiation in teaching methodology.

#### 5.4.5 To fail or not to fail

The phenomenon of *failure* is inherent in the school system. *Failure* rates will naturally be higher in school systems which enforce minimum achievement standards in each class than in school systems which practice "automatic" promotion. Whether the multiple purposes of education, both individual and social, are better met under rules that result in "automatic" promotion or by stringent examination systems, and what curriculum or criteria changes respond to individual pupil differences, are all questions deserving further inquiry.

#### 5.4.6 Establishment of an Education Research Bureau

At present the Education Division of the Department of Indian Affairs uses the services of Education Planners to carry out limited research and make recommendations in respect of educational planning. Recently the Human Sciences Research Council undertook certain projects on behalf of the Department of Indian Affairs. Although for the moment this arrangement appears to fill a vital and necessary educational planning function, it is the writer's contention that, for the results of research to be



be undertaken by the education authority concerned. Therefore it is recommended that consideration be given to the establishment of an Educational Research Bureau on similar lines to that of the Transvaal Education Department.<sup>(35)</sup> The function of the Research Bureau should be:

- (i) to organise and/or undertake research and experiments at the request of, or with the approval of the Director of Indian Education;
- (ii) to encourage research and experiments in connection with all aspects of education and to assist other researchers for which the Department provides facilities and information;
- (iii) to make recommendations in respect of all matters of an educational nature, such as organization of educational institutions, curriculum development, teaching methods and testing and evaluation.

#### 5.5 SUMMARY

This is a study of the incidence of *failure* in Indian secondary education in Natal, in which academic performance was considered against the background of a number of variables such as socio-economic factors, family size, birth order, IQ, health, absenteeism, study and reading habits, parents' level of Western education, family income, participation in extra-curricular activities and certain behaviour and personality traits.

A random sample of 1 787 pupils (1 092 boys and 695 girls) who wrote the Standard VII Academic Course examination in 1974 was selected from 16 Indian secondary schools in Natal.

Data were obtained by administering a set of questionnaires to the pupils and the form-teachers. Data processing was done by the ICL computer service.

The Chi-square statistical techniques was used to test for significance. The findings suggest that:

- (i) there are significant relationships between academic performance and the following variables: parents' level of Western education, religion, birth-order (especially among first-born boys) IQ and absenteeism;
- (ii) certain of the variables tested influenced the academic performance of the boys differently from those of the girls. These variables are family income, physical handicaps, reading habits and participation in extra-curricular activities. The trend was that these variables influenced the boys' performance more than the girls' performance.
- (iii) there were certain variables which were not significantly related to academic performance. These were: health of pupils, use of the library for borrowing books, fathers' occupation, having one's own room, family size, language commonly spoken at home and the number of times the pupils were transferred from one school to another

Finally certain recommendations are suggested with a view to reducing *failure* at school.

REFERENCES

1. Lafferty, H.A.: "A Study of the reasons for pupil failure in school." *Educational Administration and Supervision*, Vol. 24, 1938, p.18.
2. Behr, A.L.: "Meeting the needs of the underachieving child in South Africa: An analysis of current resources and needs". An address delivered at the National Conference on the Underachieving Child - University of Durban-Westville 30 September 1974, p.6.
3. Ibid.,
4. Banks, O, and Finlayson, D.: *Success and Failure in the Secondary School*. Methuen & Co. Ltd., London, 1973. pp.83-84.
5. Behr, A.L.: op. cit., p.6.
6. Ibid.,
7. Pringle, Kellmer, M.L.: *Able-Misfits- The Educational and Behaviour difficulties of Intelligent Children* Longmans, London 1970. p.108.
8. Mearing, Judith, S.: Sex and cultural differences in performance on certain verbal creativity measures." *The Journal of Educational Research*, Vol. 61 No. 3 Nov. 1967. pp.114-116.
9. Van der Walt, N.: *Die Vraagstuk van Druiping op Skool - 'n Geskielkundige - Vergelykende Studie* Doctor Philosophiae Thesis UNISA 1962 pp:97-99.
10. Mearing, Judith, S.: op. cit., pp.114-115.
11. Gross, M.: "Learning Readiness in two Jewish Groups" - Occasional Paper Center for Education, New York, 1967. p.78.
12. Lavin, D.E.: *Predictions of Academic Performance* cited by Butcher, H.J. *Human Intelligence its Nature and Assessment* Methuen, London, 1968 p.28.
13. Banks, O, and Finlayson, D.: op. cit., p.182.
14. Van der Walt, N.: op. cit., pp.150-152.
15. Tyreman, M.J.: "Absence from School and its treatment." *The Slow Learning Child* Vol. 12, No. 2 Nov. 1965. pp.113-118.
16. Pillay, M.G. and Naguran, C.A.: "A Decade of Growth and Progress" *Fiat Lux* Vol. 11. No. 3 May-June 1976, p.22.
17. Lucas, C.J.: "Mental Health and Student Wastage" *British Journal of Psychiatry* No. 112, 1946, p.484.
18. Pringle, Kellmer, M.L.: op. cit., p.79.



19. Wells, G.: "Childrens' Early Language Experience" *Educational Review* Vol. 27 No.2 Feb. 1975. p.123.
20. Harris, D.I.: *Emotional Blocks to Learning - A Study of the reasons for failure in School* The Free Press, New York 1961 pp.101-107.
21. Naylor, F.D.: *Personality and Educational Achievement* John Wiley - Sydney 1972, p.10.
22. Taylor, R.G.: "Personality Traits and Discrepant Achievement" *Journal of Counselling Psychology* Vol. 11, 1964 pp.76-82.
23. Barton, K. and Dielman, T.E.: "Personality and IQ Measures as Predictors of School Achievement" *Journal of Educational Psychology* Vol. 63 No. 4 1972, pp.398-404.
24. Banks, O, and Finlayson, D.: op. cit., p.94.
25. Behr, Dorothea: *An Investigation into the Proficiency and Background Factors likely to affect performance of a group of first-year students at the University College, Durban.* No. 1965, p.7.
26. Burger, R.: "Are Doctors' Children Bad at Schoolwork?" *Education in Germany* No. 12/1967 Bad Gadesberg p.21.
27. Banks, O and Finlayson, D.: op. cit., p.93.
28. Ramphal, : "A Study of Three Current Problems of Indian Education" Doctor of Philosophy Thesis U.N. 1961 pp.266-267.
29. Louttit, C.M.: *Clinical Psychology* Harper Brothers, New York 1947 pp.246-251.
30. Van der Walt, N.: op. cit., pp.139-147.
31. Provincial Administration of the Cape of Good Hope.  
(Department of Education) "Teaching in the Primary School" -  
Suggestions for the consideration of Principals and Teachers.  
1973.
32. Schools Council paper on Item Banking. Discussion with Behr, A.L.
33. Human Sciences Research Council (Institute for psychometric Research)  
Item Banks 1431/2 PS Pretoria 1977.
34. Department of Indian Affairs (Division of Education) File No.  
19/20/6/2.
35. Transvaal Education Department: Report of a Mission to oversea  
countries Part 2. Educational Research April 1965. p.76.

S E L E C T E D   B I B L I O G R A P H Y

---

- AINSWORTH, MARJORIE: "The Effects of Environmental Factors on Secondary Educational Attainment in Manchester: A Plawden follow-up" *Schools Council Research Studies* Mac Millan Educational Ltd., London 1974.
- AMES, V.: "Factors related to high School achievement" *Journal of Educational Psychology* Vol. XXXiv 1943.
- ASHBELL, B.: *The New Improved American* Mc Graw - Hill, New York, 1965.
- BANKS, O., FINLAYSON, D. : *Success and Failure in the Secondary School - An Inter-disciplinary Approach to School Achievement* Methven & Co. Ltd. London 1973.
- BARTLETT, ETHELL: "The intelligent school failure" *Times Educational Supplement* Dec. 21 1962.
- BEEZ, W.V.: "Influence of biased Psychological reports on teacher behaviour and pupil performance" *Social Psychology of Teaching* Ed. Morrison and McIntyre Penguin 1972.
- BEHR, A.L. : *A Textbook of Educational Method* J.L. van Schaik Ltd. Pretoria 1973
- BEHR, A.L. : "Historical Perspectives to Indian Education" *Fiat Lux* Vol. 5 No. 9 November 1970.
- BEHR, A.L. : "Meeting the Needs of the Underachieving Child in South Africa : An Analysis of Current Resources and Needs." An address delivered at the National Conference on the Under-achieving Child, held at University of Durban-Westville. 30/9/74.
- BEHR, A.L. : *Methods and Techniques in Educational and Psychological Research* Van Schaik Ltd. - Pretoria 1973.
- BEHR, A.L. : "Some present day Innovations in Education and their Implications" An address delivered to the Chatsworth Branch of SAITA, 28 May 1968 *The Teachers' Journal* July 1968.
- BEHR, DOROTHEA: "The Study of the Occupational Preferences and Values of a Group of First Year Indian Students at the University College of Durban. *Journal of the University of Durban-Westville*. Vol. 1 No. 2. Nov. 1972.
- BEHR, A.L., & Mac Millan R.G. : *Education in South Africa*, Van Schaik Pretoria 1971.
- BERNSTEIN, B.: "Some Psychological Determinants of Perception - an Enquiry into Sub-cultural Differences" *British Journal of Sociology*. No. 9 1958.
- BIRCH, N.G. & GUSSOW, J.D. : *Disadvantaged Children - Health, Nutrition and School Failure* Harcourt Brace, New York 1970.



- BOOYENS, J., ALSOPP, V.M., NAIDOO, P.R., MAKAN, C.V., MANJOO & CAMPBELL, G.D.: The Nutritional somatometric and socio-economic status of twenty Chatsworth Indian Households *University of Durban-Westville Journal* 2(1) Nov. 1973.
- BORG, W.R.: *Educational Research - An Introduction* Longmans - New York 1969.
- BRICKLIN, B. & BRICKLIN, P.M.: *Bright Child - Poor Grades - The Psychology of Underachievement* Delacorte Press : New York 1967.
- BRUNER, J.S.: *The Relevance of Education* George Allen & Unwin London 1972.
- BURT, C.: *The Causes and Treatment of Backwardness* University of London Press 1958.
- CHOPRA, S.L.: "Cultural Deprivation and Academic Achievement" *The Journal of Educational Research* - Vol. 62 Aug. 1962.
- CHOPRA, S. : "Family Size and Sibling Position as related to measured intelligence and academic achievement." *The Journal of Social Psychology* Vol 70 1966.
- CHOPRA, S.L.: "Parental occupation and academic achievement of high school students in India. *The Journal of Educational Research* Vol. LX 1967.
- CHOWDHORY, P.: *Report of an Investigation into the Problem of Wastage and Stagnation in Primary Schools in the District of 24 Paraganas Calcutta* Directorate of Education: West Bengal 1965.
- CLAUSEN, J.A. & WILLIAMS, J.R.: *Sociological Correlates of Child Behaviour*. Sixtysecond Year-book of the National Society for the Study of Education. Chicago University Press. Part 1 1963.
- CLOUGH PATRICIA: "500 000 Dropouts - But Public Indifference. *The Times Educational Supplement* No. 3049 2 Nov. 1973.
- COLEMAN, J.S. et al.: *Equality of Educational Opportunity* U.S. Govt. Printing Office Washington. D.C. 1960.
- COOMBS, R.H., & DAVIES, V.: "Socio-Psychological Adjustment in Collegiate scholastic success". *The Journal of Educational Research* Vol. 61. No. 4. Dec. 1967.
- CRAIG, J.K.: "Assessment in Secondary Schools with Special Reference to Certain Overseas Countries" Lecture delivered at the National Conference on Evaluation. 5 July 1974 Witwatersrand University.
- CULLEN KATHLEEN: *School & Family : Social Factors in Educational Attainment*. Gill and MacMillan Dublin 1969.
- CURRY, R.L.: "The effect of Socio-Economic status on the scholastic achievement of sixth grade children." *The Bristish Journal of Educational Psychology* Vo. XXXII 1962.



- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular I.E.  
No. 27 of 1967.
- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular I.E.  
No. 22 of 1968. File No. 19/15/6/2.
- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular I.E.  
No. 32 of 1971.
- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular  
Minute BD of 1972.
- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular I.E.  
No. 28 of 1972.
- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular  
Minute A.W. of 1973.
- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular No.  
D.O. of 1974.
- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular I.E.  
No. A.Y. of 1974.
- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular I.E.  
No. 27 of 1975.
- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular I.E.  
No. 32 of 1976.
- DEPARTMENT OF INDIAN AFFAIRS Circular I.E. No. 4 of 1977.
- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular I.E.  
No. 25 of 1977.
- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular  
Minute BB of 1975.
- DEPARTMENT OF STATISTICS: Population Census 1970. 8 Dec. 1975.
- DEUTSCH, M.: "Some Psychological Aspects of learning in the Disadvantaged  
Child". (Studies of the Social Environment and the Learning  
Process) *Basic Books Inc.* New York 1967.
- DE WET, R.: "Vryetydse Leesgewoentes Van Indiërstudente" *Journal of  
the University of Durban-Westville* Vol. 1 No. 2 Nov. 1972.
- DOUGLAS, J.W.B.: *The Home and the School* Mac Gibbon and Kee London,  
1964.
- DOWNIE, N.M. and HEATH, R.W.: *Basic Statistical Methods*. 2nd edition  
A Harper International Student Reprint. New York 1965.
- EKSTROM, R.B.: "Experimental Studies of Homogenous grouping" *School  
Review* No. 69. 1969.

- FERGUSON, G.A.: *Statistical Analysis in Psychology and Education* Mac Graw - Hill Book Co. New York 1976.
- FINLAYSON, D.S.: "Towards a Socio-Psychological View of School Achievement" *British Journal of Educational Studies*. Vol. XXI No.3 Oct. 1973.
- FANTINI, M.D. AND WEINSTEIN: "*The Disadvantaged*" - Challenge to Education. Harper & Row. New York 1968.
- GETZELS, J.W. AND THELAN, H.A.: "A Conceptual Framework for the Study of the Classroom Group as a Social System, *Social Psychology of Teaching* (eds.) Morrison, A. and Mc Intere, D. Penguim Books 1972.
- GLASS, D.V.: *Social Mobility in Britain* Routledge London, 1954.
- GOLDEN, M. AND BIRNS, B.: "Social Class and Cognitive Development in Infancy" *Merryll - Palmer Quarterly of Behaviour and Development* - Detroit: Vol. 14. No. 2. 1968.
- GOOD, C.V. AND SKATES, D.E.: *Methods of Research, Educational, Psychological, Sociological*. Appleton - Century - Crofts N.Y. 1954.
- GULLIFORD, R.: *Backwardness and Educational Failure* National Foundational Research - England & Wales. 1969.
- HARRIS, D.: "Factors affecting College Grades - A review of literature" *Psychology Bulletin* No. 37, 1970.
- HAVINGHURST, ET. AL.: *Growing up in River City* - John Wiley - New York, 1962.
- HESS, R.D. & SHIPMAN, V.C.: "Early Experience and the Socialisation of Cognitive Modes in Children" *Child Development* Vol. 36 - 1965.
- HODGES, A. AND BALOW, A.: "Learning Disability - Relation to Family Constellation" *Journal of Educational Research* Vol. 55. 1969.
- HOLT, J.: *How Children fail* Pitman - New York - 1964.
- JENSEN, A.R.: "Intelligence Learning Ability and Socio-Economic Status" in *Journal of Special Education* (Philadelphia) Vol. 3. No. 1 1969.
- JENSEN, A.R.: "The culturally disadvantaged: Psychological and Educational Aspects" reproduced in *The Teachers' Journal* June 1968 - South African Indian Teachers' Association.
- KNELLER, G.F.: *Existentialism in Education* John Wiley and Sons New York 1958.
- KNELLER, G.F. ed.: *Foundations of Education* John Wiley - New York 1971.



- LANGELAND, A.: "Aspects of Failure" *International Review of Education* Vol. III 1957.
- LLOYD, W.B.: External Examination - A Brief Historical Survey *Fiat Lux* Vol. 10, No. 1 Feb. 1975.
- LOTTER, J.M.: *Socio-Ekonomiese Opname van Indiër in Natal. Deel 4: Opvoedkundige Peil en Skool Bywoning* - Human Sciences Research Council - Pretoria 1975.
- LUCAS, C.J. AND KELVIN, R.P.: Mental Health and Student Wastage" *British Journal of Psychiatry* No. 112 1946.
- MALHERBE, E.G.: *Education in South Africa* Vol.11 1923-1975. Juta and Co. Ltd. Cape 1977.
- MALHERBE, E.G.: Onderwys en die armblanke Doel III.
- MATLIN, A.H. AND MEDELSON, F.A.: "The relationship between Personality and Achievement variables in the Elementary School." *Journal of Educational Research* Vol. 58 No. 10, 1965.
- MEARIE JUDITH: "Sex and Cultural Differences in verbal creativity measures" *The Journal of Educational Research* Vol. 61. No. 3. Nov. 1967.
- MILLER, G.W.: *Success, Failure and Wastage in Higher Education* George Harper & Co. London 1970.
- MINER, BETTY: "Sociological background Variables affecting School Achievement." *Journal of Educational Research* No. 8 April 1968. Vol. 61.
- MUSGROVE, F. AND TAYLOR P.H.: "Pupils expectation of Teachers" *Social Psychology of Teaching* - Penguin Books, London 1972.
- NAGURAN, C.A.: "Differentiated Education well on its way." *Fiat Lux* Vol. 10. No. 6 June/July 1975.
- NAIDOO, B.A.: "Indian Education with Special Reference to Socio-Economic Aspects. *SAITA Teachers' Journal* Nov. 1969.
- NAIDOO, K.P.: "Secondary Education for Indians in Natal" *Teachers' Journal* - Organ of the South African Indian Teachers' Association Vol. XVI May 1967 No. 1.
- NATAL EDUCATION DEPARTMENT: *Schools Hand book Directions for the Conduct and Control of Government European and Government Aided Indian Schools.*
- NATAL EDUCATION DEPARTMENT:- Senior Certificate Examination Handbook 1966.
- NAYLOR, F.D.: *Personality and Educational Achievement* - John Wiley & Sons, Australasia Sydney, 1972.
- NEL, B.F.: "A Phenomenological approach to the problems of modern youth." *Education and our Expanding Horizons* II N 1961



- NEL, P.R.T.: *Report on Education for Indian in South Africa*. Unpublished Report to the Minister of Indian Affairs. Annexure B. June 1964.
- NEWSON, J.: "Child Rearing Practices" *Educational Research in Britain*. No. 3 Ed. Butcher, H.J. and Pont, H.B. University of London Press 1973.
- NIVEN, J.: "Assessment of What and for What in the Primary School" *The Transvaal Educational News* Vol. LXXIV No.8. Aug. 1971.
- OSMAN, E.: "Education and the Indian Girl." *Fiat Lux* Vol. 10, No.3. April 1975.
- PAUK, W.J.: "Are Present Reading tests valid for Both Girls and Boys?" *The Journal of Educational Research* 1960.
- PILLAY, M.G. AND NAGURAN, C.A.: "A Decade of Growth and Progress" *Fiat Lux* Vol. 11 No.3 May/June 1976.
- PLATT, W.J.: *Research for Educational Planning* UNESCO: International Institute for Educational Planning. Paris 1970.
- PROVINCE OF NATAL: Report on Provincial Education Committee (Wilks Report) 1946.
- PROVINCE OF NATAL: Report of the Director for the year 1945.
- PYPER: Parliamentary Debates Dept. of Indian Affairs - File 19/46/4/3.
- Raad vir Geestewatensloplike Narvoning Pretoria 1970 - verslag Nr.- M.T. 2 - Die 1965 Talentopnometoets program.
- RAMPHAL, C.: "A study of three current Problems of Indian Education" Thesis - for Doctor of Philosophy U.N. 1961.
- ROSENTHAL, R. & JACOBSON, L.: *Pygmalion in the Classroom* Holt Rinehart Winston. New York 1968.
- RUSHTON, J.: The Relationship between Personality Characteristics and School Success in eleven years old children. *British Journal of Educational Psychology*.
- SAMPSON, E.E.: "Birth Order, Need Achievement and Conformity," *Journal of Abnormal Psychology* Vol. IXIV, 1962.
- SCHACHTER, S.: "Birth Order, Eminence and Higher Education." *American Sociological Review* Vol. XXVIII, 1963.
- SCHONNEL, F.T.: "School Failire" *The Slow Learning Child*. Nov. 1956.
- SCHONELL, F.: "The Slow Learning Child." *The Australian Journal of Education of Backward Children*, Nov. 1956.
- SCHULMAN, PATRICIA: "An investigation into the Performance of a Group of Durban Indian School Children on the Weschler Intelligence Scale for Children." Unpublished M.A. Thesis (1970)

- SILBERMAN, C.E.: *Crisis in the Classroom - The Remaking of American Education*. Vintage Books: New York 1970.
- SINHA, D.: "A Psychological Analysis of some factors associated with Success and Failure" in *University Education*. *Indian Educational Review* (1) 1966.
- SMILANSKY, MOSHE AND SARAH: "Intellectual Advancement of Culturally Disadvantaged Children" in *International Review of Education* Vol. XIII 1967. No. 4.
- SOUTH AFRICAN INDIAN TEACHERS ASSOCIATION: *The Teachers' Journal*, June 1968.
- SUID AFRIKAANSE BURO VIR RASSE:- *Aangeleenthede 1975 Indiërbevolking van Suid Afrika, Pretoria*.
- SUGDEN, M.A.: "Chatsworth: Social and Economic Characteristics of the Population. *Journal of the University of Durban-Westville*. Vol. 1 No. 2. 1972.
- THE JOINT MATRICULATION BOARD: *Matriculation Examination Handbook*, 1977 Pretoria Part 1.
- THE NATAL MERCURY: 26 July 1975.
- THE NATAL MERCURY REPORT: 18 January 1972.
- THE TRANSVAAL EDUCATIONAL NEWS: Vol. LXXIV No.8. December 1977.
- T.O.D. Verslag deur die Komitee insake gedifferensieerde middlebare Onderwys vir Blankes 1957.
- THORNDIKE: "Selected factor influencing over - and under achievement in young school age children" in *Review of Education Research* Vol. 44. No. 4. Fall, 1974.
- TIZARD, J.: "Intelligence and Race Theory" *Daily News* 28 April 1975.
- TRANSVAALSE ONDERWYSDEPARTMENT: "Druiping in Standard 9." Ten opsigte van alle Provinsiale Hoërskole in Transvaal - Desember 1965 NR. 144. Uitgevoes in die Onderwysburo Oktober 1967.
- TYREMAN, M.J.: "Absence from School and its Treatment" *The Slow Learning Child*. Vol. 12 No. 2 Nov. 1965.
- UNIVERSITY OF NATAL: (Department of Economics) *A Survey of Indian Housing in Durban*.
- UNIVERSITY OF NATAL: (Department of Economics) "The Indian Domestic Budget" *Additional Report No. 6 of Natal Regional Survey - Keartlands*. Durban 1969.
- VAN DER WALT, N.: Failure at School 'Part II' *Fiat Lux* Vol. 7. No. 10. December 1972.



- VAN DER WALT, N.: "Nursery School Education, Department of Indian Affairs" in *Early Childhood Education: The Nursery School Association of South Africa.*
- VAN DER WALT, N.: Die Vraagstuk van druiping op skool - 'n Geskiedskundige - Vergelykende Studie, P.H.D. Thesis University of South Africa. 1962.
- VAN WYK DE VRIES: *Main Report of the Commission of Inquiry into Universities* RP25/1974 Government Printer.
- WALL, W.D. SCHONNEL, F.J. AND OLSON, W.C.: *Failure at School - An International Study.* UNESCO Institute for Education. Hamburg, 1962.
- WERNER, E.E. AND SIMONIAN, K.: "Ethnic Socio-Economic states differences in Abilities and Achievement in Hawaii" *Journal of Social Psychology* (Provincetown) Mass Vol. 75 1968. pp.43-59.



## APPENDIX A

1. Chi-square used to compare expected scores or values with actual scores or values.

The formula for the chi-square test is:

$$\text{Chi-square } (X^2) = \sum \left\{ \frac{(A - E)^2}{E} \right\}$$

A = actual scores or value, and

E = expected score or result.

## 4A Boys

ACADEMIC PERFORMANCE OF BOYS AND MOTHERS' LEVEL OF  
WESTERN EDUCATION

	None	Cl.(i)- Std. 2	Std. 3 - 6	Std. 7 - 10	Total
Pass	239 a	173 b	367 c	136 d	915
Fail	<u>34 e</u>	<u>42 f</u>	<u>54 g</u>	<u>14 h</u>	<u>144</u>
	273	215	421	150	1 059

	A	E	A-E	(A-E) <sup>2</sup>	$\frac{(A-E)^2}{E}$
a	239	235,8	3,12	9,74	0,041
b	173	185,7	-12,76	162,94	0,877
c	367	363,7	3,24	10,53	0,028
d	136	129,6	6,39	40,91	0,315
e	34	37,12	3,12	9,74	0,262
f	42	29,23	12,76	162,94	5,574
g	54	57,24	3,24	10,53	0,184
h	14	20,39	6,39	40,91	2,006

$$X^2 = 9,287$$

$$X^2 = 9,287 \text{ for } 3df$$

$$p < 0,05$$

Significance  $p < 0,05$

## APPENDIX A Cont.

2. Chi-square computed in a fourfold table by the use of the formula below. This formula avoids the calculation of expected frequencies.

$$\text{Chi-square} = \frac{N(ad - bc)^2}{(a+b)(c+d)(a+c)(b+d)}$$

To determine whether there is a significant difference in the academic performance of boys who speak English at home and those that speak the vernacular.

	English	Vernacular	Total
Pass	742 (a)	176 (b)	918 (a+b)
Fail	<u>112</u> (c)	<u>33</u> (d)	<u>145</u> (c+d)
	854 (a+c)	209 (b+d)	1 063 (N)

$$X^2 = \frac{1\ 063 (742 \times 33 - 112 \times 176)^2}{918 \times 145 \times 854 \times 209}$$

$$= \frac{1\ 063 (24\ 486 - 19\ 712)^2}{133\ 110 \times 178\ 486}$$

$$= \frac{1\ 063 \times 22\ 791\ 076}{23\ 758\ 271\ 460}$$

$$= \frac{24\ 158\ 540\ 560}{23\ 758\ 271\ 460}$$

$$X^2 = 1,01 \text{ for 1df}$$

$$p < 0,01$$





## APPENDIX B Cont.

12. Number of days the pupil was absent in 1974

Days

0-9	10-19	20-29	30+

13. Below are a series of descriptions of behaviour shown by children. After each statement are three columns: DOESN'T APPLY, APPLIES SOMEWHAT and CERTAINLY APPLIES. If the child definitely shows the behaviour described by the statement place a cross in the space CERTAINLY APPLIES. If the child shows the behaviour described by the statement but to a lesser degree or less often place a cross in the space under APPLIES SOMEWHAT. If, as far as you are aware, the child does not show the behaviour place a cross under DOESN'T APPLY.

- 13.1 Nervous  
 13.2 Withdrawn  
 13.3 Restless/Inattentive  
 13.4 Lack of concentration  
 13.5 Co-operative

CERTAINLY APPLIES	APPLIES SOMEWHAT	DOESN'T APPLY

14. Please place a cross(X) in the appropriate space for each of the following personality traits.

PERSONALITY TRAIT	Very Weak	Weak	Average	Good	Outstanding
14.1 Initiative and zeal					
14.2 Self-confidence					
14.3 Perseverance					
14.4 Reliability					
14.5 Social adaptability					

15. How well do you know this pupil?

Very well  Moderately well  Not very well

16. Name of Teacher \_\_\_\_\_

THANK YOU

APPENDIX C

UNIVERSITY OF DURBAN-WESTVILLE  
 (DEPARTMENT OF EMPIRICAL EDUCATION)

QUESTIONNAIRE

CODE

A

9
---

To be answered by all the pupils who were in Std. 8 Academic group in 1974.

Dear Student,

Please complete the following questions as accurately as possible. The information you and others provide will be used in a Research Study on how pupils perform at school. I am particularly interested in why pupils fail. I am sure your responses, whether you passed or failed in 1974, will contribute significantly towards solving some of the problems we face in education.

Please remember that all information you provide will be treated as strictly confidential. You and your school will not be identified.

Most of the questions merely require a cross (X) in the appropriate space. A few questions require ranking in order of importance.

If a question does not apply to you, please place a cross (X) in the not applicable column.

Thank you for your cooperation.

1. a. Name of your school: \_\_\_\_\_

b. Your code number: \_\_\_\_\_

c. Your present standard

Std. 8	Std. 9

d. Sex

Male	Female

e. How old were you on 31/12/1974?

13	14	15	16	17	18	19	20+ yrs

f. Religion:

Hindu	Islam	Christian	Other (state)



## APPENDIX C Cont.

g. What Indian language group do you belong to?

Tamil	Hindu	Telugu	Gujerati	Urdu	Other(state)

h. What language is *mainly* spoken at home?

English	Tamil	Hindu	Telugu	Gujerati	Urdu	Other

2. a. Is your father living?  
 b. Is your mother living?  
 c. Are your parents divorced or separated?  
 d. Have you a step-father?  
 e. Have you a step-mother?  
 f. Are you living with your parents?  
 g. Are you living with friends or relatives?  
 h. Does your mother (or step-mother) work?  
 i. Is your father working?

Yes	No	Not Applicable

3. a. How many brothers are living with you?

1	2	3	4	5	6	7	8+

b. How many sisters are living with you?

c. Are you first born, intermediate born or last born?

First	Intermediate	Last

4. a. What standard of education did your father and mother receive at school?

	None	Cl.i-Std.2	Std. 3-6	Std. 7	Std. 8	Std. 9	Std. 10
Father							
Mother							





## APPENDIX C Cont.

6. a. Would you consider the socio-economic condition of the area in which you live to be:

Poor	Average	Above Average	Wealthy

- b. Please state the name of the district where you live.  
(e.g. Chatsworth, Asherville, City etc.)
- \_\_\_\_\_

7. a. In which of the following sports did you participate in 1974?

Soccer	Cricket	Table Tennis	Athletic	Karate	Judo	Swimming	Other (state)	None

- b. About how many hours per week did you spend in sports last year?

less than 1 hr.	2 to 3hrs.	4 to 5hrs.	6 to 7hrs.	8-10hrs.	None

- c. Did you take part in

School debates	School plays	Not Applicable

- d. Do you read the newspapers?  
e. Do you read any magazines?  
f. Do you borrow books from the library?

Rarely or Never	Sometimes	Regularly

- g. Which newspaper(s) do you read regularly?

- h. Which magazine do you read regularly?
- \_\_\_\_\_

8. a. About how many hours per day do you spend in doing homework?

Less than 1 hr.	1-2 hrs	2-3 hrs.	3-4 hrs.	None







## APPENDIX C Cont.

13. What course of study did you follow in 1974?  
(e.g. G35 C4 S2 D3 etc.) \_\_\_\_\_

14. Did you choose this course because:

- a. Your teacher/principal advised you  
b. It was your parent's choice  
c. It was your own choice  
d. Your friend took the same course  
e. You were forced to take it against your will by your teacher/ principal

Yes	No	Don't know

15. Below is listed a number of subjects. Please place a cross (X) in the appropriate column if it affects you.

Column 1: Place a cross (X) opposite the subject you took last year.

Column 2: Place a cross (X) opposite the subject if you took it on the Higher Grade.

Column 3: Place a cross (X) opposite the subject if you took it on the Standard Grade.

Column 4: Place a cross (X) if you FAILED the subject.

	1	2	3	4
	Subject	took on the Standard Grade	took on the Higher Grade	Subject failed
English				
Afrikaans				
Latin				
Biology				
Physical Science				
Mathematics				
History				
Geography				
Accounting				
Economics				
Business Economics				
Typing				
Home Economics				
Housecraft				
Other				

APPENDIX C Cont.

16. Did you fail to obtain the aggregate marks last year?  
 17. Did you fail to pass Std. 8 in 1974?

Yes	No

a. Total number of subjects you failed in 1974

0	1	2	3	4	5	6

18. If you failed to pass Std. 8 in 1974 please rank the following reasons for your failure in order of importance.

Place 1 if it is the most important reason for your failure

Place 2 if it is a contributory reason for your failure

Place 3 if you are not sure.

Place a cross (X) if it does not apply to you.

You did not work hard	School work was not interesting	Wrong choice of subjects	You were sick	Not sure	Not Applicable

19. What do you wish to become after you leave school?  
 (Place a cross (X))

seek work	become a teacher	become a lawyer	become an accountant	enter business	other specify	don't know

20. Do you attend school because:

- a. You like school  
 b. You are forced to attend school  
 c. You have a strong desire to succeed in life

Yes	No	Don't know

THANK YOU.



A STUDY OF FAILURE IN SCHOOL WITH SPECIAL  
REFERENCE TO  
INDIAN SECONDARY EDUCATION IN NATAL

BY

CHINNAPEN AMATCHI NAGURAN

B.A., B.Com., B.Ed., N.T.D.

Submitted in part fulfilment of  
the requirements for the degree of

MASTER OF EDUCATION

in the Department of Empirical, Special  
and Remedial Education in the Faculty  
of Education - University of  
Durban-Westville

Supervisor: Prof. A.L. Behr, B.A., B.Sc., B.Sc.(Hons.), M.Ed.,  
D.Ed., U.E.D. Head of the Depart-  
ment of Empirical, Special and  
Remedial Education, University  
of Durban-Westville.

DURBAN

FEBRUARY 1978



## ACKNOWLEDGEMENTS

I wish to express my indebtedness to the following people and organizations for their assistance and co-operation in making this research project possible:

Prof. A.L. Behr, Head of the Department of Empirical, Special and Remedial Education, University of Durban-Westville, for his unstinted guidance throughout this study project. His thoughtful recommendations, interest, encouragement and thorough and able supervision of the research will always be appreciated;

The Director of Indian Education for permission to use information from the records and Departmental files. (As an Education Planner in this Department, the writer was able to receive the ready and willing co-operation of senior officers, principals and teachers);

The Deputy Director, Mr. F.C.W. Hawkins for assisting me with statistical methods used in this study;

Dr. N. van der Walt the Chief Planner, for his inspiration, encouragement and invaluable comments;

Mr. M. Naidoo, Assistant Education Planner, and Mr. P.N. Done for assisting me with calculation of Chi-square statistics;

Mr. H.B. Singh, lecturer in English, Springfield College of Education for kindly checking the language;

Miss Elizabeth Maduray for her personal interest in the typing of the manuscripts;

The Ernst Oppenheimer Memorial Trust for the award of a Study Grant to enable me to meet part of the costs involved in this project;

My son and daughter for typing the draft form of the report and for proof-reading the final typing;

Finally, my wife and children, for their patience and encouragement during the many months of this research.

It is hereby declared that the opinions expressed or conclusions reached are those of the author and are not to be regarded as a reflection of the views of the above-mentioned persons or organizations.

C.A. NAGURAN



C O N T E N T S

	PAG
CHAPTER ONE	
1. THE PURPOSE, SCOPE AND SIGNIFICANCE OF THE PRESENT STUDY .....	1 -
1.1 <u>INTRODUCTION</u> .....	1
1.2 <u>DEFINITIONS AND ASSUMPTIONS</u> .....	3
1.3 <u>THE BACKGROUND TO THE STUDY</u> .....	5
1.3.1 The Indian Community's Concern about the High Failure Rate in Indian Education ....	7
1.4 <u>THE PURPOSE OF THE PRESENT STUDY</u> .....	10
1.4.1 Assumptions and Limitations .....	12
1.5 <u>THE PROBLEM OF FAILURE AND RELATED MATTERS</u> .	12
1.5.1 Socio-Economic and General Environmental Factors .....	13
1.5.2 The Other View .....	22
1.5.3 Economic or Material Circumstances of the Family .....	25
1.5.4 Intelligence .....	29
1.6 <u>SUMMARY</u> .....	32.
CHAPTER TWO	
2. A BRIEF HISTORY OF INDIAN SECONDARY EDUCATION IN NATAL WITH SPECIAL REFERENCE TO EXAMINATION PROMOTION AND RETARDATION PROCEDURES .....	41 - 12
2.1 <u>INTRODUCTION</u> .....	41
2.2 <u>SOCIO-ECONOMIC AND EDUCATIONAL BACKGROUND OF THE INDIAN COMMUNITY IN NATAL</u> .....	41
2.2.1 Structure and Distribution .....	41
2.2.2 Economic Aspects .....	42
2.2.3 Sociological Aspects .....	43
2.2.4 Cultural Aspects .....	45
2.2.5 Educational Aspects .....	45
2.2.6 Summary .....	48
2.3 <u>A BRIEF HISTORICAL OVERVIEW OF INDIAN SECONDARY EDUCATION IN NATAL</u> .....	49

	PAGE
2.3.1 The Curriculum .....	52
2.3.1.1 Streaming in Natal White Schools and its Implication for Indian Education	57
2.4 <u>SOME ASPECTS OF EXAMINATION IN GENERAL</u> .....	60
2.4.1 The Assumptions .....	62
2.4.2 The Decision .....	62
2.4.3 The Criteria .....	62
2.4.4 Manipulation of Failure rates .....	63
2.4.5 The Value of Examination .....	67
2.5 <u>SOME ASPECTS OF INDIAN SECONDARY EDUCATION UNDER THE NATAL EDUCATION DEPARTMENT DURING THE PERIOD 1953 - 1965</u> .....	68
2.5.1 Examinations .....	69
2.5.2 Internal Examination Procedures .....	70
2.5.2.1 Examinations and Promotions .....	71
2.5.2.2 Pupils absent from Examinations ...	72
2.5.2.3 Nature of Examination .....	72
2.5.2.4 Conduct of Examination .....	73
2.5.2.5 Promotion Requirements: Internal Examination - Standards VII and IX .	74
2.5.2.6 External Examination Procedures Prior to Streaming .....	77
2.5.2.6.1 Standard VI Examination for Indian Pupils: 1953 - 1965 .....	77
2.5.2.6.2 The Natal Junior Certi- ficate Examination ....	78
2.5.2.6.3 The Senior Certificate (School Leaving) and the Matriculation Exemption Certificate Examinations	80
2.5.2.6.3 The Natal Senior Certifi- cate Examination 1953-1965	88
2.5.2.6.5 Changes brought about as a result of the introduction of streaming in White Schools: 1966-1971 .....	90
2.6 <u>SOME ASPECTS OF INDIAN SECONDARY EDUCATION UNDER THE DEPARTMENT OF INDIAN AFFAIRS DURING THE PERIOD 1966-1977</u> .....	92



2.6.1	The School Curriculum .....	93
2.6.1.1	Afrikaans .....	96
2.6.1.2	The New System of Differentiated Education .....	98
2.6.2	Examination .....	99
2.6.3	Promotion and Retardation procedures under the Department of Indian Affairs	101
2.6.3.1	Standard VI .....	101
2.6.3.2	Standard VII and IX .....	102
2.6.3.3	Standard VI and VII: (Academic Course) Promotion Requirements	104
2.6.3.4	Standards VIII and IX Promotion Requirements .....	106
2.6.3.5	The Practical Course - Standards VI to VIII Promotion Requirements .....	107
2.6.4	External Examination Promotion and Retardation Requirements .....	108
2.6.4.1	The Junior Certificate Examination .....	108
2.6.4.2	The Senior Certificate Examination .....	108
2.6.4.3	The Senior Certificate Examination Under the New Differentiated Education System .....	110
2.7	<u>THE NORMALIZING PROCEDURE</u> .....	115

### CHAPTER THREE

3.	THE INCIDENCE AND EXTENT OF FAILURE IN INDIAN SECONDARY EDUCATION WITH SPECIAL REFERENCE TO NATAL .....	125 - 187
3.1	<u>INTRODUCTION</u> .....	125
3.2	<u>FAILURE AS REFLECTED IN THE SCHOOLS INTERNAL EXAMINATION SCHEDULES</u>	125
3.2.1	Results of the Standard VI Examination ...	126
3.2.2	Results of the Standard VII Examination ...	131
3.2.3	Results of the Standard VIII Examination ..	139
3.2.4	Results of the Standard IX Examination ...	140

3.3	<u>FAILURE AS REFLECTED IN THE EXTERNAL EXAMINATION</u>	144
3.3.1	The Standard VI Examination results under Natal Education Department .....	145
3.3.2	The Standard VIII (J.C.) Examination Results ...	147
3.3.3	The Results of the Senior Certificate Examination	152
	3.3.3.1 Failure according to subjects .....	162
	3.3.3.2 Ratio of Boys and Girls failing subjects	165
3.4	<u>AN OVERVIEW</u> .....	172
3.4.1	Prior to Streaming in Indian Schools .....	173
3.4.2	The Period during the system of Streaming in White Schools in Natal .....	174
3.4.3	The Period during Streaming in Indian Schools under the Department of Indian Affairs .....	177
3.4.4	The Period during the introduction of the New System of Differentiated Education .....	179
3.4.5	The holding power of Indian Schools .....	182

#### CHAPTER FOUR

4.	A STUDY OF FAILURE AT THE STANDARD VIII LEVEL IN A SELECTED GROUP OF INDIAN SECONDARY SCHOOLS IN NATAL. ..	188 - 24
4.1	<u>THE NATURE OF THE PRESENT STUDY</u> .....	188
4.2	<u>PROCEDURE IN THE PRESENT STUDY</u> .....	189
	4.2.1 Sampling .....	189
	4.2.2 Choice of Methods for gathering Information .....	195
	4.2.2.1 The teachers' questionnaire .....	196
	4.2.2.2 Pupils' questionnaire .....	197
	4.2.3 Distribution of questionnaires .....	198
	4.2.4 Replies received .....	199
	4.2.5 Checking and Verifying .....	200
4.3	<u>DATA PROCESSING AND STATISTICAL ANALYSIS OF RESULTS</u>	200
	4.3.1 Data processing .....	200
	4.3.2 Methods of Statistically analysing the results ..	202
4.4	<u>THE RESULTS OF THE PRESENT STUDY</u> .....	205
	4.4.1 Sex of Pupils and Academic performance .....	206
	4.4.2 Age of Pupils and Academic performance .....	207
	4.4.3 Academic performances and certain aspects of Socio-Economic background .....	208



	PAGE
4.4.3.1 Fathers' occupation .....	208
4.4.3.2 Parents' Western level of education ...	212
4.4.3.3 Family income .....	215
4.4.3.4 Material Comforts at home .....	216
4.4.4 Religion and Academic performance .....	217
4.4.5 Birth order, Sibling and Academic performance ..	218
4.4.5.1 Number of Siblings and Academic perfor- mance .....	220
4.4.6 Language mainly spoken at home and Academic per- formance .....	221
4.4.7 IQ and Academic performance .....	224
4.4.8 General health of pupil and Academic performance	226
4.4.8.1 Physical Handicaps .....	228
4.4.9 Absenteeism and Academic performance .....	229
4.4.10 Study and Reading Habits and Academic performance	230
4.4.10.1 Time spent on doing homework .....	230
4.4.10.2 Reading Habits .....	231
4.4.11 Extra-curricular Activities and Academic per- formance .....	234
4.4.12 School transfer and Academic performance .....	236
4.4.13 Choice of Courses and failure .....	239
4.4.14 Teachers' assessment of Pupils' Behaviour Problems	243
4.4.15 Personality Traits and Academic performance ....	244
4.4.16 Pupils' Attitude to School .....	246

## CHAPTER FIVE

5. GENERAL CONCLUSIONS AND RECOMMENDATIONS .....	252 - 273
5.1 <u>LIMITATIONS OF THE PRESENT STUDY</u> .....	252
5.2 <u>DISCUSSION OF THE FINDINGS</u> .....	253
5.2.1 Variables within the Pupils .....	254
5.2.1.1 Variables which relate significantly to Academic performance of boys and girls .....	254
5.2.1.2 Variables which differently influence the Academic performance of boys and girls .....	257
5.2.1.3 Variables which appear to have no signi- ficant relationship to the Academic performance of both boys and girls ....	258



5.2.1.4	Teachers' assessment of pupils' behaviour and personality traits .....	259
5.2.2	Variables extraneous to the Pupils .....	260
5.2.2.1	Variables which relate significantly to academic performance of boys and girls	260
5.2.2.2	Variables which differently influenced the Academic performance of boys and girls .....	261
5.2.2.3	Variables which appear to have no influence on Academic performance of both boys and girls .....	261
5.3	<u>CONCLUSION</u> .....	264
5.4	<u>RECOMMENDATIONS</u> .....	265
5.4.1	The selection function of the Standard V Examination .....	265
5.4.2	The Practical Course .....	266
5.4.3	Underachievement .....	267
5.4.4	Differentiation between Higher Grade and Standard Grade .....	268
5.4.5	To fail or not to fail .....	269
5.4.6	Establishment of Education Record Bureau .....	269
5.5	<u>SUMMARY</u> .....	270
	 SELECTED BIBLIOGRAPHY .....	 274

A P P E N D I C E S

APPENDIX		PAGE
A	CALCULATION OF CHI-SQUARE STATISTICS .....	282
B	QUESTIONNAIRE - TEACHERS .....	284
C	QUESTIONNAIRE - PUPILS .....	286

LIST OF FIGURES

FIGURE	DESCRIPTION	PAGE
1.1	PERCENTAGE OF PASSES OF WHITE AND INDIAN CANDIDATES IN THE NATAL SENIOR CERTIFICATE EXAMINATION: 1959 - 1967 .....	9
3.1	STANDARD VI RESULTS: 1965 - 1971 .....	127
3.2	PERCENTAGES OF PASS AND FAILURE STANDARD VII: 1967 - 1972 .....	133
3.3	RESULTS OF INTERNAL STANDARD IX EXAMINATION: 1967 - 1972 .....	142
3.4	RESULTS OF EXTERNAL STANDARD VI EXAMINATION: 1958 - 1962 .....	146
3.5	RESULTS OF NATAL JUNIOR CERTIFICATE EXAMINATION: 1953 - 1961 .....	148
3.6	PERCENTAGE OF PASSES IN THE NATAL SENIOR CERTIFICATE EXAMINATION: 1953 - 1962 .....	154
3.7	PERCENTAGE OF PASSES IN THE NATAL SENIOR CERTIFICATE EXAMINATION: 1965 - 1971 .....	158
3.8	HOLDING POWER OF INDIAN SCHOOLS: 1966 - 1970 .....	184



LIST OF TABLES

TABLE	DESCRIPTION	PAGE
1.1	COMPARISON OF AVERAGE MATRIC AND AVERAGE ACHIEVEMENT ACCORDING TO IQ OF FAILURES AT UNIVERSITY .....	29
2.1	FAMILY INCOME OF INDIANS IN NATAL .....	44
2.2	EDUCATIONAL LEVEL OF ADULT INDIAN MALES IN NATAL .....	46
2.3	EDUCATIONAL LEVEL OF INDIAN MEN AND WOMEN ACCORDING TO AGE .....	47
2.4	THE EFFECT OF CONSISTENTLY APPLYING DIFFERENT PASS RATES .....	64
2.5	NUMBER OF PUPILS COMPLETING A 6 YEAR COURSE FOR DIFFERENT FAILURE RATES .....	65
2.6	COMPARISON OF SCHOOLS WITH BEST STD. IX RESULTS AND SCHOOLS WITH WORST STD X RESULTS .....	66
2.7	PROMOTION REQUIREMENTS IN THE INTERNAL EXAMINATION FOR STDS. VII - IX .....	74
2.8	PROMOTION REQUIREMENTS UNDER THE SYSTEM OF STREAMING - STANDARD VII AND IX .....	76
2.9	PROMOTION REQUIREMENTS - JUNIOR CERTIFICATE EXAMINATION .....	79
2.10	NUMBER OF CANDIDATES WHO TOOK EITHER AFRIKAANS OR LATIN IN THE JUNIOR CERTIFICATE EXAMINATION: 1962 - 1965 .....	79
2.11	NORMS OF PERCENTAGE OF CANDIDATES WHO SHOULD FAIL IN THE MATRICULATION SUBJECTS .....	118
3.1	THE RESULTS OF ACADEMIC COURSE STANDARD VI UNDER THE DIFFERENTIATED SYSTEM OF EDUCATION	128
3.2	THE RESULTS OF COMBINED ACADEMIC AND PRACTICAL COURSE UNDER THE DIFFERENTIATED SYSTEM OF EDUCATION .....	130
3.3	FAILURE RATE IN STANDARD VII: 1967 - 1972 ...	131
3.4	RESULTS OF ACADEMIC COURSE STANDARD VII UNDER THE DIFFERENTIATED SYSTEM OF EDUCATION	134
3.5	RESULTS OF ACADEMIC AND PRACTICAL COURSE STANDARD VII: 1973 - 1975 .....	136
3.6	COMPARATIVE PASS AND FAILURE RATE - ACADEMIC STANDARD VI AND VII	

TABLE	DESCRIPTION	PAGE
3.7	DISTRIBUTION OF IQ SCORES OF PUPILS IN STANDARD V PRACTICAL COURSE .....	138
3.8	RESULTS OF STANDARD VIII ACADEMIC INTERNAL EXAMINATION .....	139
3.9	RESULTS OF ACADEMIC COURSE STANDARD IX UNDER THE SYSTEM OF DIFFERENTIATED EDUCATION .....	143
3.10	RESULTS OF STANDARD VI EXAMINATION - COLOUREDS AND INDIANS: 1958 - 1962 .....	
3.11	RESULTS OF JUNIOR CERTIFICATE EXAMINATION : WHITES, COLOUREDS AND INDIANS: 1953 - 1962	149
3.12	RESULTS OF STANDARD VIII EXAMINATION: 1967-1971 .....	151
3.13	RESULTS OF NATAL SENIOR CERTIFICATE EXAMINATION : WHITES, COLOUREDS AND INDIANS: 1953 - 1962 .....	153
3.14	RESULTS OF NATAL SENIOR CERTIFICATE EXAMINATION 1965 - 1971 ADVANCED GRADE .....	160
3.15	RESULTS OF NATAL SENIOR CERTIFICATE EXAMINATION 1966 - 1971 ORDINARY GRADE .....	161
3.16	RESULTS OF SENIOR CERTIFICATE EXAMINATION: 1973 - 1974 .....	163
3.17	SUBJECT FAILURES IN THE SENIOR CERTIFICATE EXAMINATION 1972 - 1974 .....	164
3.18	RATIO OF BOYS AND GIRLS FAILING IN THE VARIOUS SUBJECTS IN THE SENIOR CERTIFICATE EXAMINATION .....	166
3.19	RESULTS OF SENIOR CERTIFICATE EXAMINATION UNDER THE NEW SYSTEM OF DIFFERENTIATED EDUCATION .....	169
3.20	PERCENTAGE OF PASS AND FAILURE IN INDIVIDUAL SUBJECTS - SENIOR CERTIFICATE EXAMINATION .....	171
3.21	PUPILS WITH IQ RANGE OF 101 - 131+ IN THE PRACTICAL COURSE .....	180
3.22	ELIMINATION OF SECONDARY PUPILS IN NATAL ..	185
4.1	DISTRIBUTION OF INDIAN SECONDARY SCHOOLS IN NATAL .....	
4.2	DISTRIBUTION OF SAMPLE SCHOOLS USED IN THIS STUDY .....	190



TABLE	DESCRIPTION	PAGE
4.3	BREAKDOWN OF PUPILS IN THE COHORT OF STANDARD VIII IN THE SAMPLE SCHOOLS :.....	194
4.4	CALCULATION OF CHI-SQUARE - EXAMPLE .....	203
4.5	TEACHERS' RESPONSE TO PUPILS' BEHAVIOUR	204
4.6	ACADEMIC PERFORMANCE ACCORDING TO SEX OF PUPILS .....	206
4.7	AGE AND ACADEMIC PERFORMANCE .....	207
4.8	ANALYSIS OF FATHERS' OCCUPATION .....	209
4.9	SOCIO-ECONOMIC STATUS AND ACADEMIC PERFORMANCE .....	210
4.10	PARENTS' LEVEL OF WESTERN EDUCATION AND ACADEMIC PERFORMANCE .....	214
4.11	FAMILY INCOME AND ACADEMIC PERFORMANCE ...	215
4.12	PUPILS WITH OWN ROOMS AND PUPILS WHO SHARE ROOMS AND ACADEMIC PERFORMANCE .....	217
4.13	RELIGION AND ACADEMIC PERFORMANCE .....	218
4.14	BIRTH ORDER AND ACADEMIC PERFORMANCE.....	219
4.15	NUMBER OF BROTHERS AND SISTERS AND ACADEMIC PERFORMANCE .....	222
4.16	ACADEMIC PERFORMANCE AND LANGUAGE SPOKEN AT HOME .....	224
4.17	IQ SCORES OF BOYS AND ACADEMIC PERFORMANCE	225
4.18	IQ SCORES OF GIRLS AND ACADEMIC PERFORMANCE	225
4.19	HEALTH AND ACADEMIC PERFORMANCE .....	227
4.20	PHYSICAL HANDICAPS AND ACADEMIC PERFORMANCE	228
4.21	ABSENTEEISM AND ACADEMIC PERFORMANCE .....	229
4.22	NUMBER OF HOURS SPENT ON HOMEWORK AND ACADEMIC PERFORMANCE .....	230
4.23	REGULARITY IN READING NEWSPAPERS AND ACADEMIC PERFORMANCE .....	231
4.24	REGULARITY IN READING MAGAZINES AND ACADEMIC PERFORMANCE .....	232
4.25	USE OF LIBRARY AND ACADEMIC PERFORMANCE .	233
4.26	EXTRA CURRICULAR ACTIVITIES AND ACADEMIC PERFORMANCE .....	



LIST	DESCRIPTION	PAGE
4.27	NUMBER OF TIMES TRANSFERRED FROM ONE SCHOOL TO ANOTHER AND ACADEMIC PERFORMANCE	236
4.28	NUMBER OF TIMES TRANSFERRED FROM ONE SCHOOL TO ANOTHER AND ACADEMIC PERFORMANCE STANDARD VII TO VIII .....	237
4.29	RESULTS OF SUBJECTS TAKEN ON THE HIGHER GRADE : 1974 .....	241
4.30	RESULTS OF SUBJECTS TAKEN ON THE STANDARD GRADE .....	242
4.31	WEIGHTED MEAN - BEHAVIOUR .....	243
4.32	WEIGHTED MEAN - PERSONALITY .....	245
4.33	REASONS FOR ATTENDING SCHOOL .....	246

A STUDY OF FAILURE IN SCHOOL WITH SPECIAL REFERENCE  
TO INDIAN SECONDARY EDUCATION IN NATAL

CHAPTER ONE

1. THE PURPOSE, SCOPE AND SIGNIFICANCE OF THE PRESENT STUDY

1.1 INTRODUCTION

This is a study about an educational problem - the problem of *failure* at school. Perhaps the most fundamental aspect is that the problem of *failure* at school is rarely, if ever, attributable to one simple cause. Rather, there is always a multiplicity of interrelated and interacting factors. As schools draw more and more children the range of differences in ability which the school must accommodate broadens. As society becomes increasingly technological, the personal and social consequences of *failure* offer great challenges to educators.

A striking feature of the post-war educational scene in Natal has been the phenomenal growth in population in Indian education - especially in secondary education.

In 1939 there were 25 081 Indian children in schools in Natal. Of this number there were only 429 or 1,7% in the secondary classes. In 1945 the school population rose to 34 166 pupils of which 876 or 2,6% were secondary school pupils<sup>(2)</sup>. During the period 1945 to 1975 the school population increased by 96 265 pupils an increase of 73,8% and during the same period the number of secondary pupils increased from 876 to 14 900 pupils - an increase of 160%<sup>(3)</sup>. Commenting on the sharp increase in the demand for secondary education



by Indian pupils, a former Chief Inspector of Indian Education in Natal reported:

"One wonders if the Indian parent ..... does not regard secondary education as a panacea for his ills. Around him he sees large numbers of European children who proceed to post-primary classes, and he reasons that if this system brings economic and other advantages to the white races it must be good for the adolescents of his own people"<sup>(4)</sup>

Whether this tremendous growth in the school population was inspired more by social and economic pressures than by any real motivation about the fundamental value of education is a moot point. In our highly competitive and success oriented society, where sifting and selection takes place, taking one boy and leaving another,<sup>(5)</sup> the problem of *failure* is of special significance for those concerned about the inequality of opportunity which is characteristic of competition, and about the short-term emotional costs which *failure* at school may involve for some individuals<sup>(6)</sup>. The problem of *failure* at school has been the focus of numerous researches, but little attention has been given to the problem of *failure* in Indian education. The Indian educational scene in this country has certain novel features. Of socio-economic factors in the Indian community we may know something, but of their implications for education, we know very little.



The present study was inspired primarily, by the need to provide some kind of empirical framework, within which some of the complexities of the process of *failure* in school can be conceptualised<sup>(7)</sup>.

## 1.2 DEFINITIONS AND ASSUMPTIONS

Failure is a relative term and much depends upon definition. At one extreme, we have a concept based on scholastic criteria, sometimes even upon performance in a few basic tool subjects like reading and arithmetic. This is a narrow view. On the other extreme, is the view that any criteria of *success* and *failure* must include at least the main intellectual and personal aspects of growth. This broad view accepts the fact that there may be *failures* and *successes* in the same child and at the same time - as, for example, when a child's social and moral development are markedly retarded for his age, while his performance in skill subjects is above the norm<sup>(8)</sup>.

According to Banks and Finlayson<sup>(9)</sup>, the task of defining precisely what we mean by *success* and *failure* is a "difficult exercise in view of the fact that schools are supposed to be concerned with many aspects of the child's progress, although some of these tend to be rather vaguely defined and difficult to assess, for example, social development."

Gulliford<sup>(10)</sup> in attempting to define backwardness and educational failure says that the term *backward* is usually used to refer to children who are not keeping up with their age group in school work, although it may also refer to a lag in mental or general development. Thus a child of ten with a reading age of eight is two years backward in reading." In using *retardation* for educational failure, Gulliford defines *failure* as "a marked discrepancy between a child's educational achievements and his ability,

as judged by intelligence tests or his general performance in everyday affairs or non academic aspects of school."<sup>(11)</sup>

Schonnel defines *failure* as:

"School failure is a process of increasing discrepancy between a child's behaviour and achievements and the expectations set up by environment including the school."<sup>(12)</sup>

Behr<sup>(13)</sup> in discussing underachievement defines *failure* as :

"Success is said to occur when *actual* attainment exceeds *predicted* attainment, and underachievement when the *actual* attainment drops below the *predicted* level".

According to Fontini and Weinstein<sup>(14)</sup> the educational process proceeds on the assumption that the basically academic subject matter must be mastered before the student can be considered to have been educated. The learner who is unable to meet these academic requirements - that is - to master the content at a prescribed rate - is considered to be a *failure* and is not permitted to proceed up to the graded hierarchy.

The Department of Indian Affairs prescribes a detailed programme of studies for the various standards. Such programmes specify, from time to time, for each standard or grade, the material which must be taught and the standard of mastery which must be attained by the pupils at the end of each school year. The normal pupil is expected to progress from one class or standard to the next higher class or standard each year. *Failure* is indicated by the pupil's inability to master the year's work and he thus repeats that year's work in the following year.

The decision to fail or promote a pupil up to and including the

Standard IX level is taken by the school principal and the inspector of education in terms of the promotion and retardation rules in force from time to time.

In summing up the definitions of *failure*, it soon becomes evident that *failure* is a relative term and much depends upon its definition. Generally definitions of *failure* reflect educational philosophies and notions of what constitutes educational growth.

For the purpose of this study, a narrower and more pragmatic view of *failure* is taken i.e. *the success or not of pupils in a class or standard, measured in terms of whether they have met the minimum requirements for promotion into the next higher class or standard.*

### 1.3 THE BACKGROUND TO THE STUDY

In a success orientated and competitive society, where the level of school education has associated with it many important vocational and financial consequences for the individual<sup>(15)</sup>, the problem of *failure* in school is of grave concern not only for the individual, but also for society as a whole.

Arising out of this concern, UNESCO convened a conference in Hamburg in 1952 on Education and Mental Health. Flowing from this Conference, there appeared a decade later (in 1962), a comprehensive report called *Failure in School - An International Study*. In its opening remarks the Report states:

"There is probably no school system in the world which is not, in one way or another, concerned about a proportion of pupils who fail".<sup>(16)</sup>



In another study in 1966 by UNESCO, which examined the problem of *failure* and *drop-out* in primary education in 21 countries, including 9 in Asia, the conclusion was that in countries which have a high percentage of children repeating a standard, the *drop-out* rate is also high.<sup>(17)</sup> Children who repeat a standard do not always remain in school to complete the repeating standard but leave school. Langeland<sup>(18)</sup>, in discussing aspects of *failure* commented:

"It is no use trying to deny that in a great many countries the problem of school failure has become an alarming phenomenon, throwing shadows of despair into the hearts of pupils and parents and of guilt into the minds of educators."

In the United States the Coleman Report (1968)<sup>(19)</sup>, and in Great Britain the Plowden Report (1967)<sup>(20)</sup>, both examined the problem of school achievement. Both these reports were concerned about the inequality of opportunities, and the resultant effect on academic performance.

In South Africa, the problem of school *failure* has been the focus of numerous reports, seminars and research studies.<sup>(21 22 23 24)</sup>

In 1965 the Human Sciences Research Council undertook a large scale project known as the Project Talent Survey. In this survey 69 908 Standard VI pupils (51,1% boys, 48,9% girls) from 832 White schools in the country were subjected to a battery of tests and questionnaires. Follow-up studies were undertaken when these children reached Standard VIII and Standard X, i.e. 2 and 4 years later, and further follow-up studies were also contemplated. Some of the pertinent findings were:<sup>(25)</sup>

29,3% of the pupils had failed at least one year at school, and of this number 8,5% two or more years.

2,4% of the pupils were classified as intellectually superior, with an IQ stanine of 9 or IQ score of 127 + on the NSAGT. Of this group 0,8% failed at school: 0,7% once, 0,1% twice.

The allied problem of *failure* and *underachievement* was the focus of attention in Durban recently. In 1974 the Faculty of Education of the University of Durban-Westville convened a National Conference on the Underachieving Child. Addressing the delegates to this Conference, Professor A.L. Behr, the Dean of the Faculty, drew attention to the problem of *failure*. He said:

"..... the problem of school failure will have to engage the attention of educators in South Africa to an extent far greater than has been the case hitherto."<sup>(26)</sup>

### 1.3.1 The Indian Community's Concern about the High Failure Rate in Indian Education

During the last two decades, the high *failure* rate in Indian education, especially in the Senior Certificate examination, has caused great concern among the Indian community. The position reached a critical point in 1967, a year after the control of Indian education was transferred from the Natal Education Department to the Department of Indian Affairs. At the time of transfer of Indian education, the Natal Education Department still controlled the Senior Certificate examination for Indian candidates in Natal.

In 1967, 66% of the Indian candidates who wrote the Natal Senior Certificate examination failed.<sup>(27)</sup> Perturbed at this high *failure* rate the South African Indian Teachers' Association issued a statement on 5 February 1968. In the opening remarks the statement says:

"This high incidence has caused alarm and the Indian Community is gravely disturbed"<sup>(28)</sup>. The statement goes on to trace the trend in the Natal Senior Certificate examination results from 1959 to 1967 of both European and Indian children. These performances are illustrated graphically in Figure 1.1.

The statement analyses the position and says that two things become clear.

- (i) the European attainment is consistently at the 80% level;
- (ii) in contrast, the Indian attainment shows fluctuation and a decline after 1961.

In demanding an inquiry into the high incidence of *failure* among Indian candidates, the Association stated:

"The sixty percent failure rate has created the impression that the large majority of Indian pupils are intellectually incapable of succeeding in the Advanced Grade Examinations. That this impression is an erroneous one becomes clear from a careful analysis of the real situation."<sup>(29)</sup>

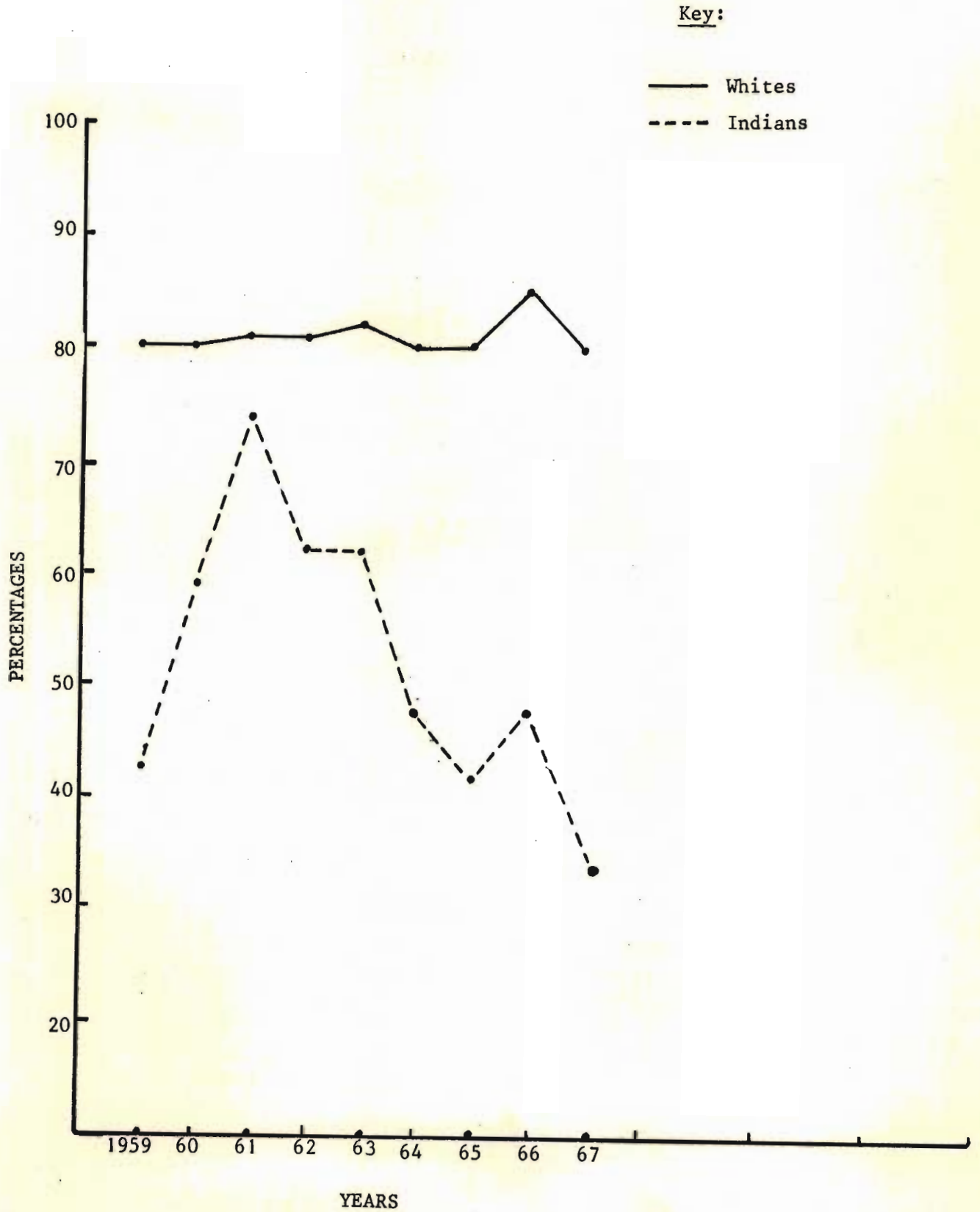
The South African Indian Teachers' Association then suggests certain reasons for the gap between European and Indian performance. Some of these, according to the statement, are:<sup>(30)</sup>

- the lack of streaming in Indian schools;
- Latin as a second language for the great majority of Indian candidates ;
- the platoon school and its effect on high school performance;
- The population shift and the consequent problem - such as adjustment to new environment and new schools;
- abnormal pupil loads in the classroom;
- lack of suitably qualified teachers, especially university graduates;



FIGURE 1.1

Percentage pass rates of White and Indian candidates in the Natal Senior Certificate Examination: 1959-1967



In May 1972, Mr. A. Pyper, M.P. raised in Parliament, the question of the high *failure* rate among Indian candidates in the Natal Senior Certificate examination. He also called for a full investigation into the causes for the poor Senior Certificate examination results that are annually achieved by Indian pupils. On this occasion Mr. Pyper remarked.

"..... when we compare the results achieved in Bantu education with those achieved in Indian education, one is absolutely shocked and amazed."<sup>(31)</sup>

According to a newspaper report, an irate parent commenting on the poor examination results in 1971 had this to say:

"Our Indian teachers in high schools are now better qualified and receive better salaries and teaching equipment and classroom conditions are now far better than those in the olden days. We are beginning to wonder if the fact that the Matriculation examination is conducted on racial lines has anything to do with more Indian failures than white failures."<sup>(32)</sup>

"It is most important that the reasons for the many failures are pinpointed as quickly as possible. As it is hard to imagine that an Indian student is in any way inferior in intelligence to his White counterpart, an investigation will show where the fault lies."<sup>(33)</sup>

#### 1.4 THE PURPOSE OF THE PRESENT STUDY

The lack of reliable research findings on the problem of *failure* in Indian schools has given rise to many speculative reasons for the high incidence of *failure* among Indian pupils.

Addressing a local Indian teacher's conference in 1969, the Principal Indian Social Worker of the South African National Council for Child Welfare <sup>(34)</sup> commented:

"Of socio-economic features in the Indian population of this country we may know something, but of their implications for Indian education we have little available research material on which to base any conclusions or generalisations."

The purpose of this study is to investigate the problem of *failure* in Indian secondary education in Natal.

In order to undertake this investigation the author will:

- (a) review pertinent literature in order to appraise the findings of other researchers in this field;
- (b) trace the history and development of Indian secondary education in Natal with special reference to examination, promotion and retardation procedures;
- (c) analyse the extent and incidence of *failure* in Indian secondary education from 1954 to 1974, specially in Natal.
- (d) statistically analyse data obtained from questionnaires to find if there is any relationship between *failure* and a number of variables, *inter alia*:
  - socio-economic factors,
  - intelligence,
  - absenteeism,
  - choice of subjects taken by the pupils,

The method and procedure will be outlined in Chapter 4.



#### 1.4.1 Assumptions and Limitations

Ideally, the present researcher would have liked to study the role of the school in pupil performance - for it is in the school, where *success* and *failure* take place. According to Getzels and Thelen<sup>(35)</sup> the school or the classroom is a social institution, and it is within this social system that several factors interplay which may influence a pupil's academic performance. But this aspect is beyond the scope of the present study. Therefore, no attempt will be made to control or even investigate class differences in content or teaching methods, since the primary purpose of this investigation was to study *failure per se*.

*Success* and *failure* are defined in relation to academic achievements, as measured by the results of the schools' internal examinations or other method of evaluation, and the external examinations conducted by an outside body. In the case of Indian education, at present the Division of Education, Department of Indian Affairs is the external examining body. The present study, therefore, proceeds on the assumption that each school's method of internal examination or other method of evaluation, is a valid evaluative instrument, based on the minimum promotion and retardation requirements as set out in the rules of the examinations procedure of the Department of Indian Affairs.

#### 1.5 THE PROBLEM OF FAILURE AND RELATED MATTERS

The problem of *failure* in school has been the focus of numerous researches, and the topic of many government reports; yet there is no conclusive understanding of the complexity of the problem.<sup>(36)</sup>

Van der Walt<sup>(37)</sup> carried out a comparative study of the problem of *failure* in 1962 and he commented:

"Talle ondersoekers het dan ook die probleem van druiping nagevors. Daar is gevind dat in byna alle gevalle daar nie net 'n enkele oorsaak is nie maar 'n hele struktuur van oorsake."

The following is a review of some aspects of research findings on the problem of *failure* at school:

#### 1.5.1 Socio-Economic and General Environmental Factors

Commenting on the influence of environmental factors on academic performance, a UNESCO Report<sup>(38)</sup> stated:

"It is axiomatic in modern child psychology that environmental factors shape, facilitate or inhibit growth in many subtle ways as yet imperfectly understood."

Learning is directly or indirectly influenced by factors outside the classroom: some of them operating immediately others more remotely, at least in time.<sup>(39)</sup>

Several studies, *inter alia*, Ames<sup>(40)</sup> Chopra<sup>(41)</sup> Miner<sup>(42)</sup> Davies and Coombs<sup>(43)</sup> Coleman<sup>(44)</sup> Havinghurst<sup>(45)</sup> Deutch<sup>(46)</sup> Finlayson<sup>(47)</sup> Birch and Gussow<sup>(48)</sup> Kathleen Cullen<sup>(49)</sup>, show positive relationship between socio-economic background and academic achievement.

Reviewing earlier research findings, Chopra<sup>(50)</sup> states that in some studies this relationship holds good, even when measured intelligence is held constant. In his study, Chopra used 433 science pupils, (age range 15-17 years) randomly selected from sixteen boys' secondary schools in Lucknow, India. He found that the mean marks scored by the pupils in the higher socio-economic group were significantly

higher than those of the pupils from the middle and the lower socio-economic groups. The differences between the middle and the lower socio-economic groups, however, did not reach the level of significance. There was a positive relationship between socio-economic background and achievement in English, mathematics and science; but achievement in Hindi, biology and art was relatively free from the influence of socio-economic background. The pattern of relationship between socio-economic background and achievement was the same at all the three intellectual levels of ability. In his study Chopra used the Progressive Matrices Test. This is a non-verbal test where the problems are arranged in order of increasing difficulty within each set, so that the relatively easy solution to the first item helps to show the testee the way in which the more difficult problems are to be answered. By itself, it is not a test of general intelligence but used in conjunction with a vocabulary test, it is a useful test for general intelligence. In Chopra's study, pupils with percentile rankings of above 75 were regarded as having above the average intelligence, those with percentile rankings of 26 to 75 were regarded as having average intelligence and those with percentile rankings of 25 and below were regarded as having below the average intelligence.

Fathers' occupation was taken as the indicator of socio-economic background. Pupils whose fathers belonged to the professional, administrative, executive and managerial occupations were placed in the upper socio-economic group. Those pupils with parents belonging to clerical, skilled workers, minor business and sales workers were placed in the middle socio-economic group. The pupils with parents belonging to unskilled workers or the farming group were placed in the lower socio-economic group.



Why did the differences between the mean scores of the pupils from the middle and the lower socio-economic groups not reach the level of significance? The answer probably could be attributed to the fact that there is greater selection of pupils in the lower socio-economic group. In India, there is considerable dropping out of the schools as the pupils move up the educational ladder. Thus from the lower socio-economic group those reaching the high school level are generally the better motivated pupils.

This is an interesting study to replicate in the South African Indian context. In the absence of full compulsory education for Indians in South Africa, those students from the low socio-economic group who remain at school longer to complete the Senior Certificate level of education are presumably those that are highly motivated.

Chopra's findings do not agree with those arrived at by Curry<sup>(51)</sup> who contended that high intellectual ability offsets any deficiency which may be created by lower socio-economic conditions.

In another study by Hess and Shipman<sup>(52)</sup>, who investigated the cognitive environment of 163 urban four-year old Black children in the United States, found significant class differences in socialisation practices of children, that seemed to have serious consequences for cognitive growth and educability. The structure of the social class and the family, was reported to shape communication and language, which in turn shape thought and cognitive styles of problem solving.

In an excellent summary of the relationship between sociological

background and school achievement, Betty Miner<sup>(53)</sup> found that exposure to different types of stimuli outside of the school environment does produce different levels of performance, independent of ability.

Chowdhury<sup>(54)</sup> investigated the problem of failure and drop-out in primary schools in the district of Paraganas, Calcutta, in 1965. He also found that economic factors, in particular poverty, appear to be among the main causes of drop-out and failure in schools.

Kellmer Pringle<sup>(55)</sup> on the basis of an inquiry carried out in England from 1954 to 1961 among children from 4-14 years of age, found that the incidence of school failure was high in an intellectually underprivileged environment.

It is a common observation from pertinent literature, that cultural and social disadvantages prevent some obviously able children from the full utilization of their abilities. Gulliford<sup>(56)</sup> is of the opinion that poor achievements of many slow learners are due as much to the limitations of their cultural background, as to the limitations of ability. Moreover, deprivations, according to Gulliford, influence not only attainment but also the development of abilities themselves.

In another investigation into the sociological correlates of child behaviour, Clausen and Williams<sup>(57)</sup> found that social background - which includes culture, social differentiation, social class, parental occupation and family structure - influences academic performance.

A study of the effects of a child's social relationships and his physical and cultural background on school attainment was undertaken by Kathleen Cullen<sup>(58)</sup> in 1969. She found, *inter alia*, that

educationally retarded pupils tended to come from poor socio-economic areas.

In a survey, Coleman, et al<sup>(59)</sup> found that students' school achievement was correlated most highly with the group of factors consisting of home, family background and socio-economic status. Havinghurst<sup>(60)</sup> found that for every high school drop-out from the upper and upper-middle classes there were about 32 from the upper-lower and lower-lower classes. Moreover, 15 students entered college from the two top social classes for every one from the two lower classes. Havinghurst says:

"Economic deprivation, cultural isolation and ethnic segregation have not fostered the motivation and background needed for normal success in the general school system."

Literature abounds in the effects of cultural deprivation on academic performance. How does intellectual development depend upon external influences? In what respects is it a series of unfolding maturational states? According to Bruner<sup>(61)</sup>, "there is no psychological phenomenon without a biologically given organism nor one that takes place outside an environment". In discussing the culturally disadvantaged, Kneller<sup>(62)</sup> says:

"In short, the disadvantaged may be said to be those who live mostly outside the dominant culture and who, by race, religion, sex or other characteristics, find themselves handicapped in an educational system controlled by the values of the dominant culture."

Ashbell<sup>(63)</sup>, in discussing the disadvantaged, says that the meaning of the disadvantaged must include all those who are blocked in any way from fulfilling their human potential. Cultural deprivation may



be seen as a *failure* to provide an opportunity for infants and young children "to have the experience required for adequate development of those semi-autonomous central processes demanded for acquiring skill in the use of linguistic and mathematical symbols, and for the analysis of causal relationship."<sup>(64)</sup>

In an analysis of the effects of the environment on scholastic achievement, Ashbell<sup>(65)</sup> states:

"The slum child is a child of another world, our laws do not bind him, our standard middle class ambitions do not inspire him." A child from this type of environment generally falls far behind in his class as the years go by. By high school age he is more than likely to drop-out of school, headed for chronic employment, "disdaining the outside middle-class world that is already disdaining him, secretly contemptous of himself; a waste of a human being - a *failure*."<sup>(66)</sup>

In discussing poverty and childhood, Bruner<sup>(67)</sup> says that our system of education limits and starves, the capabilities of the children of the poor by "leading them into failure until they are convinced that it is not worth their while to think about school-like things." How does poverty aggravate educational *failure*? According to Birch and Gussow<sup>(68)</sup>, children who live in poverty, live lives which are not merely "intellectually depressing but physically destructive". Poor children are exposed to poor food, poor sanitation, poor housing and poor medical care. To be poor is to be assailed by a

whole range of physical conditions which, by endangering life, growth and health, depress mental development and educational potential.

These two writers conclude by saying:

"A serious attack on school failure must be an attack on the life conditions which characterises poverty wherever it is found."<sup>(69)</sup>

Jensen<sup>(70)</sup> says that one of the crucial psychological differences between low and middle socio-economic status children is in the spontaneity of verbal mediation, especially in ostensibly non-verbal learning or problem-solving situations. In short, low socio-economic status children are much less likely than middle socio-economic status children to talk to themselves as an aid to "thinking". In this study Jensen compared children of low socio-economic status with middle and upper class children on a variety of associative learning tests.

In recent years, the problem of *underachievement* has engaged the attention of educationists. What do we mean by an *underachiever*? Bricklin and Bricklin<sup>(71)</sup> define an *underachiever* as a child whose day-by-day efficiency in school is much poorer than would be expected on the basis of his intelligence. Thorndike<sup>(72)</sup> defines *underachievement* "as the discrepancy of actual achievement from some predicted value based on the regression equation between aptitude and achievement". According to Behr<sup>(73)</sup> *underachievement* occurs when the *actual* attainment *drops below* the *predicted* level.

Naylor<sup>(74)</sup> cites Lavin as maintaining that labelling of some school performances as *underachievement* or *overachievement* unfortunately tends to suggest that ability is the sole basis for predicting achievement. That an estimate of ability is a necessary piece of information, is beyond dispute; but that it is an inaccurate predictor is also beyond question. Given this inaccuracy in prediction, we should not be surprised to find wide individual differences in per-

formance at the same ability level.

Naylor goes on to cite Carmical's study to discriminate *normal achievers* and *underachievers* in terms of aptitudes, vocational preferences, values and temperament. An *underachiever* was defined for the purpose of the study, as a pupil whose I.Q. on the Otis Intelligence Test was between 110-125, and whose scholastic ranks were in the limits 2.0 to 2.9 (apparently within a total performance range of 2.0 to 5.0). In his results, Carmical found that his two groups were significantly differentiated on the verbal and numerical ability subtests of the Differentiated Aptitude Tests.

In an interesting study Kellmer Pringle<sup>(75)</sup> studied some very intelligent children whom she dubbed as *able misfits*. She found for example that children with an average I.Q. of 130 attained several years below their mental age in reading, spelling and arithmetic. When comparisons were made between educational and mental age levels, the standard of the great majority was found to be two or more years below their own mental capacity. Thus she found that the extent and degree of *underfunctioning* or *underachievement* was considerable.

In a paper on "The Intelligent School Failure" Ethel Bartlett<sup>(76)</sup> says that it was very often the most intelligent children who were school failures. She found in a study of 715 children who were regarded as *underachievers* that 135 of these children had intelligence quotients between 130 and 139, and 73 were above 140, with several in the 150's and 160's.

While agreeing that intelligence is no longer thought of as something inborn and unalterable, she says that "the fact was these children often have a very high effective and operational intelligence - the product of innate intelligence and environment. They were lively,



acute and interested in conversation, and often informed and adult. And yet they failed at school". (77)

According to the Commission of Enquiry into Universities, (78) which considered the high rate of *failure* among first year students at South African Universities, students have problems of social adjustment and other emotional problems that may become "so serious as to result in failure, even where they have intellectual capacities of the highest order."

The logical problems in the notion of *underachievement* are reflected in the concept of *overachievement*. In general, *overachievers* are defined as pupils whose school attainment is in excess of expectations formed on the basis of their ability. In this case, obviously, we would not say that such pupils ought to be performing in accordance with their ability, since an overriding concern of both teachers and educational psychologists is the maximisation of performance. (79)

Naylor argues that the concept of *overachievement* does suggest that there are variables in addition to ability which have positive effects on performance. (80)

In suggesting a theory of *underachievement* and *overachievement* Taylor<sup>(81)</sup> says that there are seven "traits" which were significantly related to achievement. These are:

- (i) the *overachiever* has positive feeling of self-worth, whereas the *underachiever* is poorly adjusted and lacks self-confidence;

- (ii) the *overachiever* has less anxiety than the *underachiever*, and has greater self-control which would enable him to direct his anxiety to constructive ends;
- (iii) conformity to authority is more characteristic of the *overachiever* than the *underachiever*;
- (iv) the *overachiever* is more concerned with social acceptance than the *underachiever*, and tends to have positive relations with peers;
- (v) the *overachiever* tends to have less conflict over issues concerning dependence and independence than the *underachiever*.
- (vi) the *overachiever* is academically rather than socially oriented in his activities;
- (vii) the *overachiever* is more realistic in his choice of goals than the *underachiever*.

In a paper presented at the National Conference on the Underachieving Child, held in Durban in 1974, Behr says:

"Underachievement ..... is usually rooted in personality problems which are not always overtly expressed and therefore are not discerned by, nor elicit prompt reaction from teachers."<sup>(82)</sup>

In terms of the studies reviewed here, it is clear that individual differences in school achievement cannot be reduced to individual differences in the intelligence of pupils. *Underachievement* suggests that a potential indicated by ability is not being realised and that factors which militate against its realisation are indeed complex.

#### 1.5.2 The Other View

While literature abounds in evidence showing a positive relationship between poor academic performance and socio-economic background, there is also much evidence to suggest that socio-economic factors are



being used merely as an excuse by both pupils and teachers. According to Peter Wilby<sup>(83)</sup> a London correspondent of the *Natal Mercury*, poor teaching is largely to blame for failure. He reported: "Notions that thousands of working-class children have crippling linguistic, social and cultural "deficits" that the schools are helpless to tackle are being discredited."

Wilby cites a London report as saying that:

"The teacher who uses poor social conditions as an excuse for poor teaching is the cause of greater deprivations than the home background itself."<sup>(84)</sup>

Even the Plowden Report on Primary Education<sup>(85)</sup> says that socio-economic factors "accounted for only 9% of the variance in individual performance of primary school children". Beez<sup>(86)</sup> cites several studies which show that the teacher's expectation of his pupils can influence his teaching. Beez attempted to show how a teacher's expectation becomes translated into behaviour in such a way as to elicit the expected pupil behaviour. In his study he found that teachers who had been given favourable expectations about a pupil tried to teach more symbols than did the teachers who were given unfavourable expectations<sup>(87)</sup>. The findings of Beez are confirmed by Rosenthal and Jacobson<sup>(88)</sup> who say that teachers act differently, depending upon their expectations for the child. When they expect the child to perform poorly they attempt to teach less.

As a former high school teacher, the present writer is well aware of the staff-room comments made by teachers about their pupils. Children coming from such poor socio-economic areas as the former Magazine Barracks, Cato Manor, Clairwood and Chatsworth areas were



branded as *failures*. By their very negative attitudes towards these supposedly "stupid" children, the teachers destroyed all the curiosity in the children. As long as the teachers were able to blame the pupils' *failure* on their poor socio-economic background, indifference and poor teaching went unnoticed.

Holt<sup>(89)</sup> in this respect says that, to a very great extent, school is a place where children learn to be stupid. "Children come to school curious; within a few years most of that curiosity is dead, or at least silent."

Social class or the socio-economic factor *per se* does not in itself account for poor scholastic achievement - what matters is not the social class from which the person originates, but rather, it is the characteristics of the person and his social environment that influence his attainment.<sup>(90)</sup>

From a phenomenological point of view, the child does not only passively conform to environmental influences, but he also actually intervenes in the environment and changes it.<sup>(91)</sup> In other words the poor environment does not in itself imply poor intellectual endowment to such an extent that the individual is left helpless to rise above his poor surrounding.

The existentialist point of view is that the "free choice of an act involves a personal responsibility for the commission." If the child lacks self motivation to learn, then the child must be made to realise that he cannot be shielded from the consequences of failure. "Nor must he blame his weakness or mistakes on the infirmity of his environment, on his family, on bad advice or on human nature"<sup>(92)</sup>.

According to Burt it was common, at one time, to place the chief blame both for intellectual dullness and for moral depravity on poverty.

In an analysis he made of the situation in London, he found that, in the general population, only 7% fall below the poverty-line.

"Applied to the whole of the country, however, 7% implies a large number : 30 000 boys and girls were found to be living in the most unfavourable surroundings, and yet making perfectly normal progress in their school work. Bunyon, Burns, Faraday and Lincoln - these and many other geniuses have shown by their lives that a man may rise to intellectual eminence despite all the drawbacks of a poverty-stricken youth." (93)

### 1.5.3 Economic or Material Circumstances of the Family

According to a UNESCO Report on failure, the child's own family is an important factor in academic performance. The Report cites several studies from almost every country, which show that factors which affect the qualities of family life also affect the child's learning. (94) The affective relationship between the child and his parents, the concern which the parents show for the child's welfare, the consistency or otherwise of discipline and in consequence, the atmosphere of security in the home, are all of great importance in the education of the child, says the UNESCO Report.

Several other studies consulted, Cullen (95), Golden and Birns (96), Jensen (97), Burt (98), Sinha (99), Summershill (100), Douglas (101), Birch and Gussow (102), all show a relationship between familial factors and academic performance. Behr (103) says that the absence of books or a suitable place to do homework, may interfere with the



child's ability to maintain the standard of academic performance of which he is capable.

A Schools' Council Research Project, at the School of Education of the University of Manchester, which studied 2 300 primary school children, found that the home factors were more closely related to scholastic attainment than were school variables. (104)

In another study, Majorie Ainsworth and Batten (105) found that considerations such as family discussion on school progress, discussion of school reports, the nature of books bought for children, provision for children to store their own books, parent's formal educational level, and nature of radio listening, correlated significantly with both primary and secondary school attainment.

Parental indifference to education appeared to be among the main causes of *failure* and *drop-out*. This was borne out in an investigation by Chowdhury (106) in Calcutta.

Miller (107) cites the Plowden Report as saying that parent's attitude to the education of their children accounted for 20% of the reasons for school failure. The criteria of parents' attitudes included age at which they wished their children to leave school, their initiative in visiting school, in talking to heads and class teachers, interest in children's homework, time spent with children in evenings and general literacy of the home as measured by the kinds and amount of reading and library membership.

Some writers postulate that, the type of language spoken in lower class families causes difficulty in children's learning at school.



According to Bruner<sup>(108)</sup> knowledge is represented by knowing how to do something. This is then "supplemented by a system of ikonic representation in which serially ordered events and actions are now rendered in simultaneous form in imagery. Finally, a third component is added - symbolic representation, in which experience is now enclosed in the more powerful notation of language with its rules not only for representing but also for transforming experience".<sup>(109)</sup>

Of all the environmental factors differentiating the lower class child from the middle class child, language appears to be the most important as far as learning is concerned<sup>(110)</sup>. Behr<sup>(111)</sup> asserts that there is a close link between language and thought, particularly the kind of abstract thought that our educational systems demand.

In another investigation Bernstein<sup>(112)</sup> found that there are two types of language - "restricted" and "elaborate". Working class speech says Bernstein, is characterised by a restricted style that is stereotyped and condensed. Sentences are short, dependent clauses are few, vocabulary is small, and gestures are enormously used in addition to or in place of speech. Moreover, this type of speech lacks in precision and is composed of cliches that are readily understood by the listener. The elaborate code, used by the better educated middle class is more specific, precise, individualised and flexible. Since children tend to internalise the spoken language of their home environment, especially that of their parents, the lower class child comes to acquire at home an inferior set of verbal techniques to his own learning at school. Whereas the middle-class child has merely to develop his linguistic skills, the lower class child has to change them. This makes it very difficult for the latter to schematize the learning which the teacher expects, since it is presented to him in the elaborate code and form of speech which is unfamiliar to him. Consequently

the learning among these children will tend to be mechanical.

The lack of adult source of information which the child from the lower class experiences, has a marked effect on his language development. Whereas middle-class children are generally brought up in homes where conversation, reasoning, questioning and explaining are continuously going on, lower class children do not often enjoy these advantages. (113)

According to Deutsch<sup>(114)</sup>, if questions are not encouraged, or if they are not responded to, children will be handicapped at school; for if they are not prepared to demand clarification, they will find themselves falling behind more and more. *Failure* will become frequent and this in turn will cause motivation to decrease and the school to lose its effectiveness.

In a study of certain current problems in Indian education, Ramphal<sup>(115)</sup> says that the standard English in Indian homes in Durban, is generally lower and provides little or no incentive to children to aspire to heights of linguistic excellence: often, the English used by the elders in the home is crude and elemental. Literal translations of the mother tongue into English are common, resulting in distortions of idiom. Even in those Indian homes where the members speak little else but English, the range of vocabulary, idiomatic usage and correct expression are, on an average, at a lower level than in an average English speaking European family.

According to Logue<sup>(116)</sup>, for most of the Indians, English falls somewhere between a first and second language. Even though many Indians use English in the local public examinations with tolerable success, it is in the finer shades of word meaning that they are weak. They

lack that intangible but very real knowledge of the language which comes not from a study of grammar books, but from the daily contact of individuals mixing from birth, in an environment which uses English as its means of communication.

#### 1.5.4 Intelligence

The theory that intelligence is a constant power, unaffected by environmental factors, and predetermined by the genes - a theory which found strong support in Spearman's viewpoint of the "g" factor, is no longer tenable. It is widely recognised to-day that the quality of education received by a child can have a marked effect on his intellectual outlook. In this regard Behr<sup>(117)</sup> warns teachers against the dangerous assumption that a mental age derived from an intelligence test may be regarded as a ceiling above which the pupil cannot be helped to rise.

In the Report of a Mission to Overseas Countries by the Transvaal Education Department (1965) the following table was used to illustrate that intelligence as such has a limited value in regard to progress at university.

TABLE 1.1

COMPARISON OF AVERAGE MATRIC AND AVERAGE ACHIEVEMENT ACCORDING TO IQ OF FAILURES AT UNIVERSITY.

IQ GROUP	100- 109	110- 119	120- 129	130- 139	140- 149	150- 159	TOTAL
Av. University Mark %	37,4	39,1	38,2	34,9	37,8	44,5	37,6
Av. Matric Mark %	48,2	50,7	52,7	55,2			51,8

SOURCE: Transvaal Education Department: Report of a Mission to



The achievement in the matriculation examination becomes higher as the I.Q. of the pupils become higher, but in the university examinations, there is not a similar increase.

The inference here is that it is not so much the intelligence of a student but the way in which he uses his intelligence, such as it is, that is important; and the way he uses it, depends on his personal qualities. Naylor<sup>(118)</sup> says that abilities and achievement are positively related, which is to say that high ability tends to go with high achievement, and low ability with low achievement. However, Naylor using the Products Moment Correlation Co-efficient, argues that the typical value of the correlation between intelligence and attainment is around  $r = +0,50$ . A value of  $r = 1,00$  has never been reported so that even though occasionally the value might be greater than  $+ 0,50$ , it never reaches unity. This implies that some part of the individual differences in attainment can be accounted for by deficiencies in intelligence.

The question is: How much? Taking  $r = + 0,50$ , Naylor, by computation, arrives at the conclusion that even if there were no individual differences in intelligence, the actual variance in school performance would still be 75% of what it is when there are individual differences in intelligence. A significant percentage of the variance in attainment must therefore be accounted for by qualities other than intelligence. This provides the point of departure for seeking correlates between personality and school achievement.

Jensen<sup>(119)</sup> raised a storm of protest when he suggested that genetic rather than environmental factors are largely responsible for the Negro's lower average IQ scores and poorer scholastic performance.

Jensen concedes that environmental factors are also involved in IQ differences. In the process of measuring the relative importance of heredity and environment, Jensen came to the conclusion that in contemporary white America, environmental factors account for no more than 20% of the variation in individual IQ's, with genetic factors accounting for the rest. Jensen's assertion that genetic factors account not only for the great bulk of the IQ differences among individuals *within* a given group, but also for the great bulk of the IQ differences *between* groups, in particular between white and black Americans, drew a sharp rebuke and challenge by Professor Jack Tizard, President of the British Psychological Society, who dismissed Jensen's claims as "operating to the limits of probability", "provocative", "spurious" and "based on false assumption"<sup>(120)</sup>.

In a research by Werner<sup>(121)</sup> and his co-workers who studied ethnic and socio-economic status differences in abilities and achievement in Hawaii, using Anglo-Caucasian, Japanese, Philipinos, Hawaiian and Portuguese children, significant ethnic group differences were found in mean Primary Mental Ability (P.M.A.) IQ and verbal comprehension, reason, space and numerical ability. Ethnic group differences were also apparent in a percentage of school achievement problems, poor grades and emotional problems. However, the researchers conclude that ethnic group differences can be attributed to child-rearing attitudes, language habits, and emphasis on achievement and educational stimulation in the homes of the children. These findings were corroborated in a study by Moshe and Sarah Smilansky in Israel in 1967<sup>(122)</sup>.

To what extent can intelligence be regarded as a good predictor of a child's potentiality? Gulliford<sup>(123)</sup> argues that the performance on an intelligence test may be depressed by poor reading or other factors. Low test scores may be reflecting a pupil's cultural and



linguistic limitations which might be remedied by special teaching.

Schulman<sup>(124)</sup>, Ramphal<sup>(125)</sup> express the view that for those who fail, there may be less emphasis on verbal-type ability and/or less opportunity to develop that, resulting in more even (but inferior) development of both types of abilities. Such an interpretation would again stress cultural factors as determinants of discrepancy patterns before intellectual level of subjects *per se* could be felt to be responsible.

#### 1.6 SUMMARY

In terms of the literature reviewed here, it is clear that *failure* at school cannot be attributed to a single factor. School *failure* is a complex problem to which there is no simple solution. But from the studies, several highly significant inferences can be drawn, namely:

- (i) Although some of the studies reviewed here have shown a tentative relationship between *failure* and low socio-economic factors, by no means are they the only factors in influencing academic achievement. Poor socio-economic background *per se* does not inhibit academic performance, but is influenced by a complex of cultural factors frequently, but not necessarily, associated with poverty and low social status. These include the nature of the language used and the whole range of unconsciously transmitted values and attitudes.
- (ii) Individual differences in school achievement cannot be reduced to individual differences in the intelligence of the pupils. Even if there were individual differences in intelligence, a significant percentage of the variance in scholastic attainment, must be accounted for by factors other than intelligence. This suggests that apart from intelligence, personality factors also



could play an important role in school achievement.

It would be safe to suggest that the background of the Indian community, their particular setting in their wider environment the factors and forces influencing change within the fabric of family and community life, would show up interesting differences and variations. Therefore, many of the issues discussed earlier on in the chapter are pertinent to the problem of *failure* in Indian secondary education, which will be taken up in Chapters 4 and 5.

REFERENCES

1. Province of Natal: Report of the Director of Education for the year 1939.
2. Province of Natal: Report of the Director of Education for the year 1945.
3. Department of Indian Affairs - *Division of Education Report 1965*.
4. Biebuyck, L.T.J. 1945/46: Province of Natal Directors Report 1945/46 - p.26.
5. Times Educational Supplement: December 21, 1962 p.819.
6. Banks, Olive and Finlayson D: *Success and Failure in the Secondary School. An Interdisciplinary Approach to School Advancement*. Methuen & Co. Ltd. London, 1973 p.viii.
7. Ibid., p.4.
8. Wall, W.D., Schonnel F.J. and Olson W.C.: - *Failure in School - An International Study*: Unesco Institute for Education - Hamburg - 1962 p.1.
9. Banks, O, and Finlayson: op.cit., p.12.
10. Gulliford,R.: *Backwardness and Education Failure*, (National Foundation of Education Research, London, 1969) p.10.
11. Ibid., p.11.
12. Schonell,F.J.: "School Failure" *The Slow Learning Child*, November 1956 pp.66-68.
13. Behr, A.L.,: "Meeting the needs of the Underachieving Child in South Africa - An analysis of Current Resources and Needs". (An address delivered at the National Conference on the underachieving child held at the University of Durban-Westville - Sept/Oct. 1974.
14. Fontini, M.D., and Weinstein: *The Disadvantaged-Challenge to Education* - Harper and Row, New York 1968 p. 206.
15. Olive, Bank and Finlayson - op. cit., p.vii.
16. Wall, Schonnel and Olson: op. cit., p.1.
17. Brimer A.: - *Wastage in Education - A World Problem - A Statistical Study of Wastage at School* - Unesco, Paris, 1974 p.24.
18. Langeland A: "Aspects of Failure" - *International Review of Education*, Vol. 111 1957 - p.129.
19. Coleman, J.S.: *Equality of Education opportunity*. U.S. Government Printing Office - Washington D.C. p.55.

20. Peters, R.S.(ed.) : *Perspectives on Plowden* - Routledge and Kegan Paul, London, 1969, pp.59-62.
21. Provinsie Oranje Vrystaat, *Verslag van die Provinsiale Onderwyskomsie 1951.*
22. Province of Natal, *Report on the Provincial Education Committee, 1946*
23. T.O.D. Verslag deur die Komitee insake gedifferensieerde middebare Onderwys vir Blankes 1957.
24. Raad vir Geesteswetensloplike Navorsing Pretoria 1970 - verslag Nr. - M.T. 2 - *Die 1965 Talentopnometoets program.*
25. Behr, A.L. op. cit., p.7.
26. Ibid., p.2.
27. South African Indian Teachers Association *The Teachers' Journal*, June 1968 p.2.
28. Ibid., p.2.
29. Ibid., p.2.
30. Ibid., p.4.
31. Pyper: Parliamentary Debates, Dept. of Indian Affairs - File 19/46/4/3
32. Natal Mercury, 26 July 1975 p.10.
33. Ibid., p.10.
34. Naidoo, B.A. : *S.A.I.T.A. Teachers' Journal* Nov. 1969. "Indian Education with Special Reference to Socio-Economic Aspects". p.16.
35. Getzels, J.W. and Thelan, H.A. : A Conceptual Framework for the Study of the Classroom Group as a Social System, *Social Psychology of Teaching* (eds.) Morrison, A and Mc Intere, D. Penguin Books 1972 p.19.
36. Banks, Olive and Finlayson D. : op. cit., p.1.
37. Van Der Walt, N., - Die Vraagstuk van druipling op skool - 'n geskiedkundige - vergelykende studie, PHD. Thesis University of South Africa. 1962 - p.186.
38. Wall, W.D. , Schonnel, F.J. and Olson, W.C. : op. cit., p.57.
39. Ibid., p.57.



40. Ames, V. : Factors related to high School achievement" *Journal of Educational Psychology* Vol. XXXIV 1943. pp.228-236.
41. Chopra, S.L. : "Parental occupation and academic achievement of high school students in India" *The Journal of Educational Research* Vol. LX 1967. pp.359-62.
42. Miner, Betty : "Sociological background variables affecting school achievement" *The Journal of Educational Research* Vol. 6 No. 8 p.372.
43. Coombs, R.H., & Davies, V.: "Socio-Psychological Adjustment in Collegiate scholastic success" *The Journal of Educational Research* Vol. 61 No. 4 Dec. 1967 pp.186-187.
44. Coleman, J.S. et al : "Equality of Educational opportunity" U.S. Government Printing Office - Washington D.C. p.55.
45. Havinghurst, J. et al.: *Growing up in River City* - Wiley New York 1962 pp.50-53.
46. Deutch, Cited by Rosenthal, et. al. - *Pygmalion in the Classroom* Holt Rinehart & Winston - New York 1968 pp.50-53.
47. Finlayson, D., "Towards a Socio-Psychological view of School Achievement" *The British Journal of Educational Studies* Vol. xxi No. 3 Oct. 1973.
48. Birch, H.G., & Gussow, J.D. *Disadvantaged Children Health, Nutrition and School Failure*. Harcourt Brace, New York 1970 p.xiii.
49. Cullen, Kathleen: *School and Family - Social Factors in Educational Attainment* - Gill & Mac Millan, Dublin, 1969 p.204.
50. Chopra, S.L. : "Cultural Deprivation and Academic Achievement" *The Journal of Educational Research* - Vol. 62 Aug. 1962 pp.435-37.
51. Curry R.L.: "The effect of Socio-Economic status on the scholastic achievement of sixth grade children". *The British Journal of Educational Psychology* Vol. XXXII 1962 pp.46-49
52. Hess, R.D. & Shipman, V.C. : "Early Experience and the Socialisation of Cognitive modes in Children" *Child Development* Vol. 36 - 1965 pp.869-886.
53. Miner, Betty: Op. cit p.372.
54. Chowdhury P. "Report of an investigation into the problem of wastage and stagnation in primary schools in the district of 24 Paraganas - Calcutta". Directorate of Education - Govt. of West Bengal 1965.
55. Pringle, Kellmer, M.L.: *Deprivation and Education* Longmans, London - 1965 pp..295-307.

56. Gulliford, R.: *Backwardness and Educational Failure*  
National Foundation for Educational Research in England  
and Wales - London 1969 p.15.
57. Clausen, J.A. & Williams, J.R.: "Sociological correlates of  
child behaviour". *Sixty - second year-book of the National  
Society for the Study of Education, part I.* Chicago,  
1963 pp.62-107.
58. Cullen, Kathleen: Op. cit., p.204.
59. Coleman, J.S. et al: Op. cit., p.55.
60. Havinghurst, R.J. & Passow, A.H.: "The Nature and needs of  
the disadvantaged" in *Sixty-Sixth year book of the  
National Society for the study of Education part I.*  
Ed. P.A. Witty - University of Chicago Press, 1967 p.15.
61. Bruner, J.S.: *The Relevance of Education* George Allen and  
Unwin, London, 1972. 20
62. Kneller, G.E. : *Foundations of Education* John Wiley & Sons,  
New York 1971, p.55.
63. Ashbell, B. : *The New Improved American* Mc Graw - Hill,  
New York, 1965: p.82.
64. Ibid., p.83.
65. Ibid., p.83.
66. Ibid., p.83.
67. Bruner, J.S.: op. cit., p.133.
68. Birch, H.G. and Gussow, J.D. op. cit., p.XIII.
69. Ibid., p.XIII.
70. Jensen, A.R. : "The Culturally disadvantaged: Psychological  
and Educational aspects" reproduced in *The Teachers' Journal*  
June 1968 - South African Indian Teachers' Association p.16.
71. Bricklin, B. and Bricklin, P.M.: *Bright child - poor grades*  
Delacarte Press, New York 1967 p.IX.
72. Thorndike : Cited by Ashbury: "Selected factor influencing over  
- and under achievement in young school age children" in  
*Review of Education REsearch* Vol. 44 No. 4 Fall, 1974  
pp.409-428.
73. Behr, A.L. : op. cit., p.2.
74. Naylor F.D. : *Personality and Education Achievement*, John wiley  
& Sons; Sydney 1972 p.15.



75. Pringle, Kellmer, M.L. : *Able Misfits - The Educational and Behaviour Difficulties of Intelligent Children* Longmans - London 1970 p.74.
76. Bartlett, Ethell: "The Intelligent school failure" *Times Educational Supplement* Dec. 21 1962 p.819.
77. Ibid., p.819.
78. Van Wyk de Vries : Main Report of the Commission of Inquiry into Universities. RP 25/1974 Government Printer p.242.
79. Naylor, F.D.: op. cit., pp.14-25.
80. Ibid., pp.14-25.
81. Taylor R.G. : "Personality traits and Discrepant achievement: A review" *Journal of Counselling Psychology* 11 1964 pp.76-82.
82. Behr, A.L. : op. cit., p.11.
83. Wilbey, P.: "Education disaster warning from the right" *Natal Mercury* 16 May 1975.
84. Ibid.,
85. Miller, G.W.: *Success, Failure and wastage in Higher Education* The University of London Institute of Education George-Harrap London 1070 p. 37.
86. Beez, W.V. : "Influence of biased Psychological reports on teacher behaviour and pupil performance" *Social Psychology of teaching* Ed. Morrison and McIntyre Penguin 1972 p.324.
87. Ibid., pp.326-329.
88. Rosenthal and Jacobson Cited by Beez Ibid., p.330.
89. Holt, John : *How Children Fail* Pitman Publishing Corp. London 1965 p. 157.
90. Miller, G.W. : op. cit., p.37.
91. Nel, B.F. : "A Phenomenological approach to the problems of modern youth". *Education and our expanding Horizons* U.N. 1961 p.186.
92. Kneller, G.F. : *Existentialism in Education* John Wiley & Sons, New York 1958.
93. Burt, C. : *The Causes and Treatment of Backwardness*. University of London Press 1953 pp.40-41.
94. Wall, Schonnel and Olson : Op. cit., pp.60-65.
95. Cullen, Kathleen : *School and Family - Social factors in Educational Attainment*. Gill & Mac Millan 1969 Dublin p.204.



96. Golden, M. and Birns, B.: "Social Class and Cognitive Development in Infancy" Merryle Palmer *Quarterly of Behaviour and Development* (Detroit) Vol. 14 No. 2 1968 pp.139-149.
97. Jensen, A.R.: "Intelligence Learning Ability and Socio-Economic Status" in *Journal of Special Education* (Philadelphio) Vol. 3, No 1 1969 pp.23-35.
98. Burt, C. : ibid
99. Sinha, D. : "A Psychological Analysis of some factors Associated with success and failure" in University Education *Indian Educational Review* (1) 1966
100. Summerskill, J. : Dropouts from College. *The American College* Ed. N. Sanford Wiley, New York 1962 p.47
101. Douglas, J.W.B. : *The Home and the School* Mac Gibbon and Kee London, 1964.
102. Birch A.G. and Gussow : *Disadvantaged Children - Health, Nutrition and School Failure*. Harcourt Brace, New York 1970 p.3.
103. Behr, A.L. : Op. cit ., p.6.
104. Ainsworth, Marjorie, et al.: "The effects of Environmental Factors on Secondary Educational Attainment in Manchester: A plowden follow-up" *Schools Council Research Studies* Mac Millan Education Ltd., London 1974 pp.3-11.
105. Ainsworth, Marjorie and et al.: Op. cit .,
106. Chowdhury. P. : "Report of an Investigation into thr problem of Wastage and Stagnation in Primary Schools" Directorate of Education, Govt. of West Bengal 1965 p.9.
107. Miller, G.W. : op. cit., p.37.
108. Bruner, J.S. : Op. cit., p.11
109. Ibid., p.20.
110. Young, B.B.W. : "Headstart and other Pre-school Enrichment Programmes" in *The Slow Learner*, Peter Owen London 1970. p.270.
111. Behr, A.L. : *A Text Book of Educational Method - A Guide for Teachers in service and Students in Training* J.L. van Schaik Ltd. Pretoria 1971 p.2.
112. Bernstein, B.: "Some Psychological Determinants of Perception - an Enquiry into Sub-cultural Differences *British Journal of Sociology* No. 9 1958 pp.159-174.
113. Deutsch, M. et al : "Some psychological Aspects of Learning in the Disadvantaged Child" (Studies of the Social Environment and the Learning Process) *Basic Books* Inc. New York 1967 -pp.39-57
114. Deutsch, M. et al. : op. cit., p,54.

115. Ramphal, C. : "A study of Three Current Problems of Indian Education" an unpublished Doctorate thesis U.N. 1961 pp.266-7.
116. Logue, G.D. : "An Investigation into the Suitability of the South African Group Test for Indian Children in Durban, (Unpublished M.Ed. Thesis U.N. 1954 p.77.
117. Behr, A.L. : "Some Present Day Innovations in Education and their Implications" - and address delivered to the Chatsworth branch of SAITA 28 May 1968 *The Teachers' Journal*, July 1968 p.36.
118. Naylor, F.D. : op. cit., p.15.
119. Jensen, A.R. : Cited by Silberman: *Crisis in the Classroom*: Vintage Books, New York 1970 pp.75-76.
120. Tizard, J. : "Intelligence and Race Theory" *Daily News*, 28-4-75.
121. Werner, E.E. et al. : "Ethnic and Socio-Economic Status Differences in Abilities in Achievement in Hawaii : *Journal of Social psychology* Vol. 75 1968 pp.43-59.
122. Smilansky, Moshe and Sarah: "Intellectual Advancement of Culturally Disadvantaged Children" in *International Review of Education* Vol. XIII 1967 No. 4 pp.410-445.
123. Gulliford, R. : op. cit., p.11.
124. Schulman, Patricia : "An Investigation into thr Performance of a group of Durban Indian School Children on the Weschler Intelligence Scale for Children". Unpublished M.A. Thesis (1970) University of Natal P.M.B.
125. Ramphal, C. : Op. cit., pp.266-7



## CHAPTER TWO

### 2. A BRIEF HISTORY OF INDIAN SECONDARY EDUCATION IN NATAL WITH SPECIAL REFERENCE TO EXAMINATIONS, PROMOTION AND RETARDATION PROCEDURES:

#### 2.1. INTRODUCTION

The aim of this chapter is two-fold: firstly to provide in a concise form the socio-economic background of the Indian community in Natal; and secondly, to briefly trace the history of Indian secondary education in Natal - with special reference to examinations, and promotion and retardation procedures.

Any attempt to provide the socio-economic background of the Indian community in Natal, and its relevance to the education of the Indian child, does not necessarily imply that socio-economic factors affect the Indian child in any manner different to the children of other racial groups; but the point may be developed to show that there are subtle and discernible differences associated with background, social evolution, status, economic and cultural factors, either dominating or characterising the Indian community as such in South Africa's multi-racial, but western oriented society.<sup>(1)</sup>

#### 2.2 SOCIO-ECONOMIC AND EDUCATIONAL BACKGROUND OF THE INDIAN COMMUNITY IN NATAL

##### 2.2.1 Structure and Distribution

According to the 1970 census there were 620 436 Asians (mostly Indians) in the Republic of South Africa. Of these 21 617 were in the Cape Province, 80 563 in the Transvaal and 514 810 in Natal.



In 1970 86% of the total Indian population of the Republic lived in the Urban areas. Of the total Indian population, 83% lived in Natal of which 72% lived in Durban - Pinetown - Inanda area.<sup>(2)</sup> In Natal, 68% of the Indian population were Hindus, 20% Moslems and the rest were mainly Christians. Of the Hindus, 90% are made up of the Tamil, Hindi and Telegu speaking groups. All the Urdu-speaking, and 75% of the Gujerati-speaking group are of the Islamic faith.

In a recent study, Booyens<sup>(3)</sup> and his co-workers found that only 26% of the Indian population, against 42% for the Whites, were economically active. The reason for this relatively low percentage of breadwinners, and therefore a relatively higher percentage of mouths to feed per breadwinner, lies in the youthful composition of the Indian population. In 1960, 45% of the total Indian population was younger than 15 years as against 27% for the White population.

### 2.2.2 Economic Aspects

If one views the Indian Community in terms of economic aspects, one will find that there are many geographical variations and group and inter-group differences. There are extremes ranging from those who may be classified as extremely wealthy down to the poverty-stricken and economically depressed groups. If a pyramid were to be constructed from the various sources depicting the economic status of the entire Indian people of the Republic, such a pyramid would have a base that is disproportionately broad in relation to its middle and upper regions.<sup>(4)</sup> Poor economic status is one feature characterising the major proportion of the Indian population, and consequently, the Indian child in his home and educational setting.

In a survey conducted by the University of Natal in 1967, it was found that 66,1% of the Indian families in Durban had incomes of less than R79 per month.<sup>(5)</sup> In another survey conducted by the University of Natal in 1969, it was found that approximately 50 - 60% of the householders in their sample had incomes below the cost of living minimum, and approximately 30 - 40% of the householders had incomes above the minimum.<sup>(6)</sup>

The family income of the Indian community is set out in Table 2.1. In 1970 approximately 34% of the family income of the Indian community in Natal was below R600 per annum. According to the Department of Inland Revenue<sup>(7)</sup> 53% of the total number of married persons and 87,3% of the total number of unmarried persons in 1974 fell in the under R200 per annum income group. In this income group, there were 30 657 married persons with a total of 51 730 children as dependants in the Republic.

### 2.2.3 Sociological Aspects

The Indian is, in many ways a person of marginal culture. He is of the East and yet not of it. He is in the West and yet not wholly within. In recent times the Indian people have moved more rapidly towards the acceptance and adoption of western concepts and modes of living than formerly. Urbanisation has had a marked impact on the way of life of the Indian people, influencing and permeating all areas of their thought and practice, but they are not as yet, fully absorbed into the mainstream of the dominant western culture. They are more within it now than ever before, but still outside on the marginal fringe.<sup>(8)</sup>

TABLE 2.1  
FAMILY INCOMES OF INDIANS IN NATAL  
1960 and 1970

		Family Income (Rand) Per Annum											
		Total families	0	-300	300-599	600-799	800-999	1 000-1 199	1 200-1 599	1 600-1 999	2 000-2 499	2 500+	?
Total	1970	99 035	3 798	9 239	21 333	14 323	11 169	8 503	12 271	6 178	4 885	6 510	826
	1960	67 989	8 020	20 362	19 765	7 525	3 744		6 071		1 530		972
Urban	1970	85 327	3 098	6 499	17 045	12 502	10 022	7 788	11 361	5 760	4 501	6 070	681
	1960	55 060	6 948	13 535	16 707	6 756	3 461		5 581		1 371		701
Rural	1970	13 708	700	2 740	4 288	1 821	1 147	715	910	418	384	440	145
	1960	12 929	1 072	6 827	3 058	769	283		490		159		271

(Source : Department of Statistics Population census, Stats., May 1976, p.71.)



#### 2.2.4 Cultural Aspects

The Indians came to South Africa with a background of a rich culture. Ethnically or by race, despite the heterogeneity by areas of origin, religion, language, etc, the Indian people have maintained their identity but in cultural or group affiliations, in patterns of family life, in kinship and in-group associations important changes have taken place.<sup>(9)</sup>

Some of these changes, especially in group affiliations, and in patterns of joint family system, may have been caused by re-settlement of the Indians in terms of the group areas policy of the country. It may be that the relatively small family-sized houses built by the authorities in such areas as Chatsworth, Merebank, Phoenix and in Pietermaritzburg have played a part in bringing about changes in the traditional joint-family system of the Indian community.

#### 2.2.5 Educational Aspects

The educational level of a community gives a clear indication of the socio-economic status of the community.<sup>(10)</sup> In an investigation carried out by the Human Sciences Research Council in 1973, into aspects of socio-economic position of the Indian community in the Transvaal, it was found, that 21,7% of the population never attended school, 2,7% did not pass the grades, 53,8% did not pass Standard VI, 24,8% passed Standard VI, 15% passed Standard VII to IX and 3,7% passed Standard X. It was also found that 34% of the women had no schooling at all.<sup>(11)</sup>

In another study carried out by the Human Sciences Research Council in 1975, on the socio-economic aspects of the Indian community in Natal, it was found that the educational level of adult Indians was as follows:

TABLE 2.2

THE EDUCATIONAL LEVEL OF ADULT INDIAN MALES IN NATAL

Educational Level	Percent	Cumulative Percent
Std. 10 +	3,5	3,5
Std. 10	3,0	6,5
Std. 9	2,3	8,8
Std. 8	8,4	17,2
Std. 7	4,2	21,4
Std. 6	28,9	50,3
Std. 5	11,4	61,7
Std. 4	10,0	71,7
Std. 3	6,1	77,8
Std. 2	4,7	82,5
Std. 1 - Grades	3,3	85,8
None	14,2	100,00
Total	100,00	-

N = 6 300

Source: Human Science Research Council: Sosio-ekonomie opname van Indiërs in Natal-Deel 4: Opvoedkundige peil en skoolbywoning. Pretoria, 1975, p.5.

From the above table it will be seen that approximately 50% of the adult sample had an educational level of Standard VI and above.

In the following table the educational level of Indian men and women according to age is presented.

TABLE 2.3  
EDUCATIONAL LEVEL OF INDIAN MEN AND WOMEN ACCORDING  
TO AGE

Age Years	Sub. Std - Std. III		Std. IV-VII		Std. VIII+	
	Men%	Women%	Men%	Women%	Men%	Women%
15 - 29	1,1	5,3	31,17	50,6	67,2	44,1
30 - 44	8,8	17,1	45,3	70,4	45,9	12,5
45+	21,8	44,2	58,4	47,8	19,8	8,1

Source: Human Sciences Research Council: Aspekte van die socio-  
ekonomie posisie van die Indiërgemeenskap in Transvaal  
Pretoria, 1974 Verslag Nr. S-32, p30.

From the above table it will be seen that the younger generation, namely, the 15 - 29 year group of Indians, has a higher level of education than the older generation. The older the women, the lower is their educational level as compared with men.

In the set up of the Indian community in the early days, a formal western education for the Indian girl was not considered a necessity. However, since the fifties the impact of the western way of life has been felt by the Indian community with greater force. The last two decades have witnessed a dramatic development in the education of the Indian girl. To-day it is accepted that every Indian girl will go to school and remain there, if she satisfies the academic requirements, until she reaches Matriculation level.

Already there is parity in numbers between the sexes at primary schools. In 1974, out of a school-going population of 129 052 from



Class (i) to Standard V, 64 073 or 49,65% were girls. In the same year, of the 50 391 pupils in Standards VI to X 21 602 or 42,87% were girls. At present approximately 40% of the Standard X pupils are girls.

The number of Indian women entering the university is increasing. For example at the University of Durban-Westville, there were 104 women students in 1964. In 1974 the enrolment of women students at this university increased to 701. The number of women graduating also increased from 4 in 1964 to 95 in 1974.<sup>(12)</sup>

#### 2.2.6 Summary

The aim of the preceding section was an attempt to relate socio-economic aspects to the education of the Indian pupils. In what respects does the background of Indian South Africans, their peculiar setting in the wider middle-class western environment, the factors and forces influencing change within the fabric of personal, family and community life, show up interesting differences and variations in their education? It may be reasonable to suggest that the sociological and psychological processes of adoption, assimilation, compensation and the resistance and defence mechanism would indicate different strands from those of other peoples.<sup>(13)</sup>

It is also reasonable to view the large proportion of Indian children, in relation to socio-economic status, environmental factors and the cultural mainstream represented in the norms of the school system, as the disadvantaged group.

Much has been said about the material progress of the Indian commu-

nity in this country. But in social and cultural aspects the Indian community has not fully assimilated itself into the mainstream of the dominant culture which is represented by the schools.

According to a senior social worker,<sup>(14)</sup> with the progressive upward mobility of the Indian people economically, middle class identification is more than simply socio-economic position. The question arises what proportion of the Indian middle-class to-day were at most one to two generations removed from lower-class status and the extent to which they have as yet grown out of the social and psychological characteristics of their former status.

### 2.3 A BRIEF HISTORICAL OVERVIEW OF INDIAN SECONDARY EDUCATION IN NATAL

The beginnings of secondary education for Indians in Natal may be traced to the year 1899, when the Higher Grade Indian School was established in Durban to provide secondary education for Indian pupils up to Standard VII. In 1899 this school offered tuition up to the Junior Certificate and Matriculation level and continued to serve that function until 1918.<sup>(15)</sup> In 1911 the Indian Education Institute was formed through private enterprise. It offered secondary education to some 100 pupils until 1914.<sup>(16)</sup>

In 1918 a fresh start was made and secondary classes were established in Durban at the Carlisle Street Indian School. By 1927 the secondary school population was 67, and this constituted 0,6% of the total school population.<sup>(17)</sup>

Another private secondary institution which served a useful purpose



in its days was the Marine College. This school was opened and run by a Mr. Papert in 1925 and flourished until 1930. (18)

The greatest advance in secondary education was made in 1930 when Sastri College was opened in Durban. It was largely through the efforts of the Rt. Hon. Mr. S.V. Sastri that this magnificent institution which was named after him came into being.

By 1932 the position in regard to secondary education for Indians improved only slightly. Secondary education was provided at two Government institutions, viz. Sastri College and the Mitchell Crescent Government Indian Girls' School which was established in 1932. (19)

In 1933, in addition to the two State schools, secondary education was provided at two State-aided schools, viz. St. Xaviers Oakford at Verulam and the Sydenham Girls' School. In all, 296 pupils were receiving instruction in secondary education at this time. Of this number, 276 were boys and 20 girls.

The secondary enrolment increased at a very slow rate. In 1940 the total enrolment at secondary schools was 554. (20)

There was a marked improvement in the over-all enrolment by 1942. The total secondary school enrolment increased from 554 in 1940 to 643 in 1942. The latter figure represented 2.2% of the school population. (21)

The post-war years, however, witnessed a phenomenal growth in Indian secondary education. In 1947 there were nine schools offering secondary education. Of these only three schools offered courses up to the Matriculation level and the rest provided tuition up to the Junior Certificate level.



Besides accommodation, the main difficulty in regard to secondary education was the small number of Indian graduate teachers. Many of those who held degrees had obtained them as external students of the University of South Africa, or as part-time students of the Natal University College. Here the choice of subjects was limited and the students were obliged to take major and qualifying courses in subjects which were not generally taught in secondary schools. Only those who obtained their degrees at Fort Hare had done post-Matriculation work in Science and Mathematics. (22)

The growth of secondary education was slow but sustained until 1958. In that year there were about 4 000 Indian pupils in secondary schools (4.4% of the total school population of 90 000. The comparative figure for White pupils was 24% in 1958). Thereafter there was a sharp rise in the number of Indian pupils. In 1965 the secondary school pupils constituted 11,5% of the total school population. (23)

Prior to the transfer of Indian Education to the Department of Indian Affairs most of the secondary schools for Indians in Natal came into being as a result of the enterprise of the Indian people themselves who provided the sites and at least half the building costs. (24) Four such high schools, namely Sastri College, Gandhi-Desai High School, Orient High School and Umzinto High School "are magnificent structures symbolising the place education has in the life of the community". (25)

In terms of the Indians Education Act (Act 61 of 1965), the control of education for Indians was transferred to the Department of Indian Affairs. This transfer was with effect from 1 April 1966 in Natal, 1 April 1967 in the Transvaal and 1 January 1971 in the Cape.

Mr. P.R.T. Nel was appointed Chief Education Planner to work out the details for the transfer of Indian education from the provinces to the control of the Department of Indian Affairs. In his report Mr. Nel commented as follows on the state of Indian education: (26)

It is clear that secondary education for Indian pupils has arrived at the crossroads- unless it is to be regarded as the prerogative of the few. With approximately 2 000 additional pupils arriving at the gates of the high schools every year it is vitally necessary that there should be bold and full-scale planning backed up by the necessary physical and financial action regarding the provision of suitable high schools."

With the take-over of Indian education, the Department of Indian Affairs paid special attention to the provision of school accommodation. In 1966 there were 29 State high schools and 2 State-aided Indian high schools in Natal. At the end of 1976 there were 48 State high schools and 4 State-aided high schools in Natal.

### 2.3.1 The Curriculum

The Oxford Pocket Dictionary defines *curriculum* as 'appointed course of study'. For the purpose of this section, *curriculum* is defined as a planned educational programme offered to the learner under the guidance of the school.

Prior to 1960, the curricula in Natal secondary schools were based on traditional considerations, dictated by more or less well-founded notions of what seemed desirable, rather than by the objectively as-



certained needs and capacities of children. Commenting on the narrow and restricted curriculum the Wilks Committee Report in 1946 remarked as follows:

"The predominantly academic bias of the school curriculum has had the unfortunate result that several important basic elements of an integrated curriculum have been neglected."<sup>(27)</sup>

Among others, due attention was not given to the more practical subjects, hence justice was not done to the interests and future needs of large numbers of pupils. This forced the pupils to follow a course of study of an intellectual character quite outside the range of interests of the bulk of the pupils. The academic bias had been all the more cramping in effect in that, the content of the course was largely dictated by the requirements of an examining body which has had the needs of university entrance as its major consideration.<sup>(28)</sup>

As the number and variety of pupils going to secondary schools increased, it was found that the subjects prescribed for Matriculation did not suit all the pupils. These subjects were all that the schools offered at the time and pupils had no option but to take them whether they went to university or not. Consequently there was a high drop-out rate at the secondary school level. For those who were compelled to pursue the Matriculation course, whether they intended to go to university or not, some of the subjects had little significance except as hurdles to be negotiated in order to obtain a certificate.<sup>(29)</sup>

The question of providing some form of education for those who would not proceed to the university, exercised the minds of many educationists in South Africa. Such men as Sir Langham Dale, Dr. Muir and Dr. Andrew



Murray, gave this matter serious attention as far back as the 1890s.

Gradually the movement to broaden the secondary school curriculum gained momentum until 1905, when the council of the University of the Cape of Good Hope appointed a committee to investigate the institution of a school-leaving certificate examination. (30)

Thus it came about in 1910, after considerable negotiations between the Education departments and the Council of the University of the Cape of Good Hope, that a new school leaving certificate examination was established. This was the first concrete step taken to provide an examination which would meet the need for differentiation at the secondary school level. In this step we find the germ of a parallelism which in later years took on a variety of forms, such as dividing pupils into an "A" stream and "B" stream or into an "A" level and "O" level in the secondary schools. (31)

At the beginning the new school leaving certificate was not popular. It was viewed with suspicion by employers who felt that, if youngsters could not survive the tougher subjects such as mathematics and Latin demanded by the traditional Matriculation, there must be something lacking in their general intelligence. In consequence, by 1912 there were only 122 candidates who took the new school-leaving certificate examination compared with 1 693 who took the Matriculation examination. Of the 51 who passed, the school-leaving certificate examination, 24 were from the Cape, 11 from the Orange Free State, 8 from the Transvaal and none from Natal. The rest were private candidates. (32) So even at that stage we notice that Natal was still adhering to the traditional Matriculation examination.

Later a feeling grew among the education departments that the examination papers for these two examinations conducted by the Joint Matriculation board, were set largely by university professors who were out of touch with the school situation. It was felt that they sometimes set papers that were widely off the mark, as regards how the subjects were being taught at schools. Consequently in the early 1920s, the Cape and the Transvaal education departments instituted their own examinations and certificates. These, however, had to receive a subject for subject recognition by the Joint Matriculation Board which also moderated the examination papers.<sup>(33)</sup>

In the beginning the schools were reluctant to enter their pupils for departmentally conducted senior certificate examinations, and continued to patronize the Joint Matriculation Board's examination. For example in the Cape Province, of nearly 2 000 pupils in Standard X, in 1923 and 1924, only 262 and 582 candidates respectively entered for the provincial examinations. In 1932 however, the Cape Education Department made it compulsory for candidates from its public schools to take the departmental examinations.<sup>(34)</sup>

In 1937 the Orange Free State introduced its own departmental examinations. The Natal Education Department, however, continued to patronize the Joint Matriculation Board's examination and it was only in 1953 that it introduced its own departmental senior certificate examination.<sup>(35)</sup>

On the issue of external examination, the Wilks Report of 1946 commented that while the three other provinces had attained a measure of freedom by the institution of their own examinations, planned on a wide basis, in Natal the Matriculation examination of the Joint Matriculation Board "has become the arbiter of the educational fate of all children, who, whatever their bent, have been forced through the academic mill."<sup>(36)</sup> In its report the Wilks Committee recommended



that:

- (i) the Standard VI Examination should be abolished;
- (ii) a Natal Junior Certificate and a Natal Senior Certificate Examination should be introduced at the Standard VIII and the Standard X stage, respectively.

On the issue of school curriculum, the Wilks Committee Report recommended *inter alia* that in order to provide for the needs of all children, four distinct and separate courses be provided. This could be done in separate schools but the Wilks Committee was against this suggestion and stated that the pupils should be kept in one school with multilateral 'sides'. In this way the education of the children could be viewed as a whole and the intellectual snobbery of academic courses be counteracted. (37)

The courses recommended by the Wilks Committee were as follows:

- (a) Practical course useful to the large number who would leave at the completion of the compulsory age minimum. All high schools were to offer this course;
- (b) Commercial courses for girls;
- (c) Pre-vocational course for boys designed for those boys who have technical and professional careers in view;
- (d) The university admission course;

The suggested curricula of the Wilks Committee included a large common core of subjects and had a strong prevocational bias. In this regard Behr and MacMillan<sup>(38)</sup> state that the ideas in general were in line with the best thought of the day on the subject.

Natal was, however, not ready for such a development, the emphasis in the schools being at that time, and later, on academic education



which was strongly entrenched. (39)

The Wilks Committee also recommended Courses A, B and D for Indian and Coloured schools and that changes in the curriculum should take place in Coloured and Indian schools at the same time as in White schools.

The recommendations of the Wilks Committee in respect of curriculum were not put into effect. After a visit by the Director of Education overseas, the Natal Education Department instituted the two stream system of education in White schools in 1962. This system of streaming was not applied to Indian and Coloured schools. In Indian schools, streaming was introduced by the Department of Indian Affairs in 1967.

#### 2.3.1.1 Streaming in Natal White Schools and its Implication for Indian Education.

In 1962 the Natal Education Department introduced the system of streaming in White schools. There were two streams, the Advanced Grade and the Ordinary Grade. The Advanced Grade which absorbed about two-thirds of the secondary pupils, led to the Senior Certificate with or without Matriculation exemption, and the Ordinary Grade operated on a special syllabus and led to the Senior Certificate only. Admission to the two streams took place at the end of the Standard VI year, based on the overall results of examinations controlled by the Natal Education Department. It was subsequently found, however, as a result of an investigation by Professor R.E. Lighton in 1963, that there was not sufficient differentiation allowed within the "A" stream, which was still too heterogenous as regards abilities. It was therefore recommended to split the "A" stream into two and have altogether three streams, A, B, C. This

remained only a recommendation. It was estimated that 63% of pupils would be in the Advanced Grade and 37% in the Ordinary Grade. In the first Junior Certificate examination written in 1963, by the two-stream White pupils, there were 67% in the Advanced Grade and 32% in the Ordinary Grade and the total number of candidates had increased by nearly 25%.<sup>(40)</sup> On the other hand, in the absence of streaming in Indian schools, 100% of the Junior Certificate candidates wrote their examination on the Advanced Grade in that year.

The secondary schools for Indians in Natal offered a very restricted curriculum. In 1963, no fewer than 87% of the candidates for the Junior Certificate examination took precisely the same course viz. English A, Latin, biology, mathematics, arithmetic, geography and history or bookkeeping.

Of those who wrote the Natal Senior Certificate examination, 74% offered the same course, namely English A, Latin, biology, mathematics, geography and history. Very few candidates took physical science or Afrikaans.<sup>(41)</sup>

In the absence of streaming in Indian schools, many pupils who would have been placed in the "O" stream, if streaming were applied, in fact followed the "A" stream course which was probably beyond their capabilities. Apart from this, pupils of varying ability range were placed in the same class. In White schools the pupils were classified and placed in separate "A" stream and "O" stream class units. This facilitated teaching, in that pupils were placed on more or less homogeneous groups, whereas in the Indian schools, teachers had to contend with heterogenous groups. Thus, the able and the weak pupils in these heterogenous groups were handicapped because in such a situation teaching was geared to meet the needs of the



average child in the class.

To facilitate the application of the system of streaming in White schools, the Natal Education Department instituted orientation courses for White teachers on the new approach to teaching the two different streams of pupils since 1964. No such provision was made available to Indian teachers. The White candidates who wrote the Natal Senior Certificate examination at the end of 1965 on either the Advanced or the Ordinary Grades, had the benefit of differentiated education since the time they were in Standard VII in 1963. On the other hand, in the Indian schools the Senior Certificate candidates, who wrote the same examination on the Advanced Grade as their White counterparts, were placed at a considerable disadvantage as they all wrote the examination on the Advanced Grade without any differentiated teaching applied to them. (42)

This is one of the basic reasons for the high *failure* rate among Indians as compared with Whites in Natal. This was evidenced by the fact that since 1964, there was a downward trend in the examination successes in Indian schools.

Apart from the lack of streaming in Indian schools, the narrow and restricted curriculum in the secondary schools together with the lack of suitably qualified teachers also contributed to the high *failure* rate. Commenting on this issue Behr<sup>(43)</sup> stated that the examination successes were on the whole very disconcerting. He said that the two principal factors contributing to the poor examination results were, firstly, a dearth of suitably qualified teachers and secondly, the lack of diversity in the range of courses.

For example, of the 2 680 candidates who wrote the Natal Junior



Certificate examination in 1963, 2 332 or 87% took the same subjects. Only 203 candidates offered Afrikaans and 2 508 offered Latin of which 901 or 36% failed. In the whole examination 925 candidates failed, but 315 of them were given Ordinary Grade passes, leaving 610 outright failures.

An important consequence of the lack of diversity in the courses offered in Indian secondary schools by the Natal Education Department, was that Afrikaans, although one of the official languages of the country, was not made compulsory for the pupils. This has had a serious effect on many pupils who later proceeded to become teachers in that they are now handicapped in view of the fact that Afrikaans is compulsory for all pupils from Class (i) to Standard X.

With the transfer of Indian education to the Department of Indian Affairs in 1966, the Advanced Grade and Ordinary Grade system of streaming was introduced in Indian secondary schools in 1967. This system of streaming continued until the end of 1972. In 1973 the Department of Indian Affairs introduced the new system of differentiated education in all its schools.

#### 2.4. SOME ASPECTS OF EXAMINATIONS IN GENERAL

While it is not the place nor is it the intention of this study to include a detailed discussion of examination and evaluation procedures, yet it will be of value to preface any consideration of *failure* in school by the briefest reference to examinations.

*Failure* is, however, a relative term both in terms of the definition we give it and in terms of some evaluation procedure such as examination or tests. *Success* and *failure* are inevitably arbitrary conceptions.

Most of the characteristics which we wish to assess for our simple or complex evaluation are present in any given school population in such a way, that if we measured them and plotted the resulting marks on a frequency graph, it would form a "curve of error". Most children's marks would bunch around the average, tailing away to fewer and fewer marks well above and well below the mean. There would be no abrupt point which clearly marked off the *failures* from the *successes*; no clearly distinguishable group with special characteristics. Hence a decision, more or less arbitrary, would have to be taken as to a cut-off point, the level below which we consider the individual child to be *failing*.<sup>(44)</sup>

According to the level at which this cut-off point is fixed, the proportions of *failure* will vary in the same group, on the same occasion and in terms of the same measures.

Even where the most accurate means of mental measurement are used, the adoption of a border-line must be a matter for judgement in the light of the educational situation and the needs of both the individual child and of the group of pupils to which he belongs. That is to say, in fact, that *failure* and *success* are relative terms, meaningful only when carefully defined, based upon a clearly expressed educational philosophy and susceptible of some sort of objective, reliable and valid measurement.<sup>(45)</sup>

*Failure* is therefore implicit in the structure of the curricula and programmes of most of the school systems of the world. In all but a few countries, a detailed programme of studies is laid down by a central authority. Such programmes specify, for each age-grade, the material which must be taught and the standard of mastery which must be attained by the end of each year's work. It is assumed





that the work prescribed, given suitable industry by the pupil and sufficient skill on the part of his teacher will be mastered in the school year. The normal pupil, therefore, will progress from year to year and in five calendar years will complete five school years of work. *Failure* will be indicated by the pupil not having mastered the work of one year, repeating it in the following year, so that he will be one year at least behind his chronological contemporaries. (46)

#### 2.4.1 The Assumptions

It is clear that the educational authorities make certain assumptions. The first is that the planners of curricula and syllabuses know the capacities of the average child sufficiently accurately to gauge what, under normal teaching conditions, he is capable of learning. Secondly, it is assumed that unless a pupil has mastered one year's work he cannot successfully undertake that of the year following. Thirdly it seems to be accepted that the repetition of a year's work will lead to a greater mastery of it and improve a weak pupil's chance of further uninterrupted progress. (47)

#### 2.4.2 The Decision

The decision to fail or not to fail is usually taken by the teacher and or by the inspector. This decision is based either upon the results of a series of tests throughout the year or upon some kind of promotion examination.

#### 2.4.3 The Criteria

The bases for promotion or retardation inevitably have a strong element of the subjective, in the choice of questions, in the marking and in the weight given to particular subjects of the curriculum. For example, it is not uncommon, particularly in the first two or three years



of school, for a pupil to fall somewhat behind in either reading or arithmetic. If these alone, or even one of them, are the determining subjects in promotion, a child may be kept down for a transitory and remediable weakness in the one subject only, whilst in fact in all other aspects of the curriculum he has made satisfactory or even outstanding progress. If to this we add the demonstrable tendency inherent in systems like this towards a consistent proportion of failures year in and year out, with peaks perhaps at particular years - end of the year of first entry; the year before transition to secondary schools; the year before entry upon direct preparation for an important external examination - then we are obliged to recognise that a child's educational career depends upon a combination of elements, many of them evidently arbitrary. (48)

#### 2.4.4 Manipulation of Failure rates

According to the UNESCO report (49) on *failure* in school, "the failure and doubling rate, as well as the drop-out or wastage figures, have, however, a large element of artificiality and it is becoming clear that they are manipulable in many ways". The report quotes the findings of Van Vliet who has made a special study of the problem of doubling and wastage in the many developing school systems of the world. An interesting finding was that the school systems tend to adopt a particular promotion rate from year to year in their primary schools: that is to say that over a period there seems to be a habit of failing at the end of each year a given, and more or less constant, proportion of pupils. This figure varies under circumstances. For example, as stated earlier, it tends in some systems to be higher at the end of the first year. Sometimes too, the imminence of an external examination is heralded by a higher *failure* rate in the

preceding year.

Miller<sup>(50)</sup> cites Jenkins who showed evidence of built-in wastage in technical institutions in England, where established percentages are failed in each year and thereby disqualified from proceeding to the following year. In the following table cited by Miller we see how, when six different pass rates are applied to a given 100 candidates in courses of up to seven year's duration, severe reduction in student numbers occurs.

TABLE 2.4

THE EFFECT OF CONSISTENTLY APPLYING SIX DIFFERENT PASS RATES TO 100 CANDIDATES IN COURSES OF UP TO SEVEN YEARS' DURATION

Years Completed	Year	50%	60%	70%	75%	80%	90%	
-	1	100	100	100	100	100	100	
1	2	50	60	70	75	80	90	
2	3	25	36	49	56	64	81	
3	4	13	22	34	42	51	73	gain ord. National Certificate
4	5	6	13	24	32	41	66	gain ord. National Certificate
5	6	3	8	17	24	33	59	gain higher National Certificate
6	7	2	5	12	18	26	53	gain higher National Certificate
7	8	1	3	8	14	21	48	gain graduateship

It would be noticed from the above table that even a pass rate of



90% applied year by year produces a high wastage. At this rate, says Jenkins, of the 100 starters only 73 would gain the Ordinary National Certificate, 59 the Higher National Certificate, and in eight years only 48 would gain graduateship of an institution. On a three year course where 66% are passed in each year only about 30% would finish in the minimum time.

In another study carried out by Van Vliet<sup>(51)</sup> it was found that dropping out of school is directly related to *failure* rates since the pupil with a record of *failure* who comes to an age at which he may legally leave, "is unlikely to persist in the thankless task".

The following table according to Van Vliet, shows the figures for various *failure* rates.

TABLE 2.5

THE NUMBER OF PUPILS PER 1 000 COMPLETING A SIX-YEAR COURSE FOR DIFFERENT FAILURE RATES (PUPILS SPEND 8 YEARS AT SCHOOL BUT LEAVE AFTER FAILING MORE THAN ONCE IN THE SAME GRADE OR MORE THAN THREE TIMES IN ALL)							
Percentage Promotion Rate	95	90	85	80	75	70	65
Percentage completing 6 year course	98,6	94,4	87,6	78,7	68,3	57,2	46,1
Percentage Drop-outs	1,4	5,6	12,4	21,3	31,7	42,8	53,9

From the above table it will be noticed that "on a promotion rate



of 90% we might expect only 50 - 60% of children to go through their primary six-year course without failure". The last line in the table indicates the percentage of all pupils who, having attained the age of the compulsory schooling, have left before their final year. Wall and his co-workers conclude "Equally it will be noted that the proportions of 'failure' can be manipulated by raising or lowering the promotion rate. Thus, much of this failure may be termed "administrative" - i.e. imposed on the schools and their pupils by the promotion system itself".<sup>(52)</sup>

In a paper delivered at an orientation course for Indian school administrators, Van der Walt<sup>(53)</sup> compared Standard IX and Standard X examination results in five schools with the best Standard X results and five schools with the worst Standard X results. The Comparison is as follows

TABLE 2.6

A COMPARISON OF SCHOOLS WITH BEST STD. IX RESULTS AND SCHOOLS WITH WORST STD. X RESULTS

	Best Std. X Results		Worst Std. X Results	
	Std. IX Failure	Std. X Failure	Std. IX Failure	Std. X Failure
Sch. A	17%	19%	17%	77%
" B	14%	22%	6%	76%
" C	17%	28%	16%	73%
" D	12%	29%	9%	72%
" E	10%	32%	7%	68%

NB: Std IX Examination is an internal examination

From the above table it is apparent that the sifting procedure was not being applied consistently. This bears out clearly what was said earlier about manipulation rates.

#### 2.4.5 The Value of Examination

Practically every country has a system of examination which plays an enormous role in the operation of its national system of education. Today examinations are used extensively both for the purpose of measuring what has been learned and for selecting from a large number of candidates a small number of the "best".

According to the *World Year Book of Education - Examinations* (1969) the main functions of examinations are:

- (a) They are used to assess the extent to which an individual has benefited from the education he has received;
- (b) The second function is selection. This process implies that the examinee or testee is being selected for something - either for further education or for some task role of society. It implies that not all young people are expected to reach the same levels of achievement and their social roles are differentiated and specialised;
- (c) Examinations are incentives which may persuade indolent youth to strenuous effort;
- (d) They are also used to predict future competence.

Evaluation is an important part of the teaching-learning process. Tests, examinations, projects, etc. are useful to students, teachers and administrators alike. They provide teachers, for example, with a means of determining the degree to which they are achieving their



objectives. A well-constructed examination enables the teacher to judge the effectiveness of his teaching, since it reveals just what it is that students have learned, and what they have not learned or have misunderstood. A good examination may also reveal weakness in the curriculum and suggest ways by which it, too, can be improved. (54)

In recent years the notions of assessment and evaluation have undergone much refinement. In a lucid article written by Professor J. Niven (55) the finer difference between assessment, measurement and evaluation is well defined. Although the article deals with assessment and evaluation in the primary schools, there are certain aspects of his views which are worth consideration in relation to the principles of the system of differentiated education. The article quotes Dobie as saying that if, in a system of differentiated education, the aim is to assist as far as possible in the individual development of each pupil, testing needs to be a means rather than an end.

Children "distribute themselves from poor to good in each of the many endeavours in which they engage. To average these attainments is unrealistic and to determine arbitrary cutting points for passing or failing demands a refinement in judgement that defies human capacities". (56)

## 2.5 SOME ASPECTS OF INDIAN SECONDARY EDUCATION UNDER THE NATAL EDUCATION DEPARTMENT DURING THE PERIOD 1953-1965

The period between 1953 and 1965 was chosen for two important reasons: First the year 1953 marked an important milestone in the history of external examination in Natal. It was in that year that the Natal Education Department instituted its own Senior Certificate examination. Prior to this, candidates from Natal entered for the examination of the Joint Matriculation Board.



Secondly, the year 1965 marked the end of an era in Indian education in Natal. It was the last year in which the Natal Education Department was allowed to control Indian education. On 1 April 1966, almost after a century of provincial control, Indian education came under the control of the central government and under the direct control of the Division of Education, Department of Indian Affairs.

In this section attention will be paid to:

- (i) the internal and external examinations and the promotion and retardation procedures in these examinations;
- (ii) the introduction of streaming in White schools and its influence on Indian secondary education in respect of promotion and retardation procedures.

#### 2,5.1 Examinations

Under the Natal Education Department there were two types of formal examinations; namely, the internal school-based examination and the external examination. The internal examinations were conducted by the school principal and his staff. The Natal Education Department laid down the rules of procedure for the internal examinations. All schools were issued with common core curricula and syllabi. Internal examinations were based on these common syllabi.

In the secondary schools, Standards VII and IX were the internal examinations.

The external examinations were conducted by the Natal Education Department. The rules governing the various external examination were set out in the respective examinations handbooks which were sent to all schools. The examinations handbooks also provided the syllabi and the prescribed books in the various subjects.

### 2.5.2 Internal Examination Procedures

In terms of the *Directions for the Conduct and Control of Government Schools and Government-Aided Indian Schools* of the Natal Education Department (issued in terms of Section 5(2) of the Natal Education Ordinance No. 23 of 1942, as amended) the following procedures in respect of internal examination were in force up to the time of transfer of Indian education to the Department of Indian Affairs in 1966: (57)

- (i) Principals and Class teachers were responsible for all normal promotions in their schools, except in those classes in which pupils entered for public examinations.
- (ii) Principals were required to submit to the District Inspectors a summary of the promotions and retardations.
- (iii) Recommendations for promotion on trial were not permitted.
- (iv) Recommendations for double promotion were only considered in exceptional cases, such as over-age pupils who were physically and mentally able to cope with the higher work. Other exceptionally intelligent children were expected to be provided for by means of an enriched programme.
- (v) Borderline failures and special cases were reviewed by the principal and recommendations submitted to the District Inspector in the summary of promotions and retardations. When moderating the question papers principals had to ensure that the standard of the papers and the selected pass mark resulted in the promotion of those fit to proceed to the next standard, and the retardation of those who would not be able to cope with the work of the higher standard.
- (vi) No child was to remain in the infant classes for more than four years.



From standard I to V no pupil was allowed to remain in any class for more than two years. Such pupils were required to be referred to the District Inspector.

- (vii) In the case of transfers, it was expected that schools would honour the promotions and retardations of other schools. Should a principal desire to question the promotion or retardation of a pupil transferred from another school he was required to refer the matter to his District Inspector.

#### 2.5.2.1 Examination and Promotions

- (i) No formal examinations were held for below Standard III. Promotions in the lower classes were based on assessment of the years' work. All recommendations for promotion above Standard II were based on internal examination results. At the discretion of the principal, one yearly or two half-yearly examinations could be held. While it was desired to have regular testing, the marks from tests were normally not used for promotion purposes.
- (ii) Where schools held one examination at the end of the year, the full promotion marks in each subject were assigned to the examination. The papers covered the work of the whole year.
- (iii) If two examinations were decided on, the first was held near the end of the first-half year, and the second towards the end of the year. The examination at the end of the first half-year was set on work covered from the beginning of the year. The final examinations were based on the work of the whole year. Not more than one-third of the promotion marks was assigned to the examination at the end of the first half-year.



### 2.5.2.2 Pupils Absent from Examination

If only one examination was held and a pupil was absent from examination, a set of marks based on internal tests (or the teacher's estimated marks) was used. If two examinations were held and the pupil was absent from the first, the promotion marks were based on the final examination alone. If such a pupil was absent from the final examination, a set of marks based on internal tests (or the teacher's estimated marks) were combined with the marks of the first examination to give the promotion marks.

### 2.5.2.3 Nature of Examination

- (i) The questions had to cover the work done in the period under review.
- (ii) Emphasis had to be given to written language and problems in arithmetic in the upper classes.
- (iii) Principals were advised to bear in mind that the pupils would proceed to secondary schools. Hence the upper primary classes were to prepare the pupils for this change. Pupils from Standard IV upwards had to accustom themselves to marshalling facts and to express themselves clearly in each of the subjects. Therefore, the question papers in such subjects as history and geography, apart from questions requiring one or two word answers, also had to include questions requiring answers in paragraph form. Marks for the latter type of questions were allocated as follows:

Standard IV	15½% to 20%
Standard V	25% to 30%
Standard VI	35% to 45%

- (iv) Standard VI was essentially regarded as a preparatory and exploratory year for secondary work. The whole course was to be planned with that in view and the examination papers were expected to test the pupils' abilities in that respect.

#### 2.5.2.4 Conduct of Examination

- (i) All papers set for the examinations had to be moderated. Moderation of papers was done by the principal or by the principal in conjunction with suitable deputies appointed by him amongst the staff.

Moderators had to scrutinise the questions and schemes of marking so as to satisfy themselves that the questions were well distributed within the syllabus and reasonable in all respects.

After the marking had been done, moderators had to check at least 10% of the answer papers to ensure that marking had been thorough and equitable.

If, in the opinion of the principal, the marking had been either too lenient or too severe, adjustments by lowering or raising the marks were recommended.

- (ii) Examination marks had to be analysed so that class report on the results had to be made by the examiner and made available for the information of the teacher so that remedial treatment could be applied promptly. In addition an analysis had to be made to show the median mark.



2.5.2.5 Promotion Requirements: Internal Examination - Standards VII and IX

(i) Prior to Streaming

When Indian secondary education was under the control of the Natal Education Department, Standards VII and IX were internal school examinations. The minimum pass requirements were classified into two sections, viz. one for those who attained a certain required minimum in the examination and who were allowed to continue their schooling, and the other for those who attained a prescribed minimum in the examination and who wished to leave school.

The promotion requirements in the internal examination for standards VII and IX are set out in Table 2.7.

TABLE 2.7

PROMOTION REQUIREMENTS IN THE INTERNAL EXAMINATION FOR STANDARD VII AND IX

STANDARD	PASS MARK	
	Promotion	School leaving
VII	Main language 33½% 4 other languages 33½% Aggregate of 7 subjects 40%	Main language 30% 3 other subjects 30% each Aggregate of 7 subjects 35% each
IX	Main language 33½% 4 other subjects 33½% Aggregate of 6 subjects 40%	Main language 30% 4 other subjects 30% each Aggregate of 6 subjects 35%



The above promotion requirements were in force until 1962 when the Natal Education Department introduced a system of streaming in the schools for the Whites.

(ii) After streaming

In Table 2.8 the promotion requirements in the internal standards VII and IX under the system of streaming are set out. It must be noted that after 1963, two entirely different promotion requirements - one for the Whites and another for the Indian pupils - were prescribed. Although in the past, Indian pupils in the secondary schools were severely restricted in the choice of subjects, the educational programme was the same for both the White and Indian pupils. When streaming was introduced in the White schools and not in Indian schools, the recommendation of the Wilks Committee that the educational programme of Indians should not differ fundamentally from those of Whites, was ignored.

The promotion requirements as set out in Table 2.8 are in respect of both the Advanced Grade and the Ordinary Grade in White schools. There was no provision for a school leaving certificate in standard VII and IX for the White pupils. As far as the Indian schools were concerned promotion in the "one track" course meant that a pupil in Standard VII and IX either passed or obtained a school leaving certificate or he failed. For the White pupil there were several possibilities in the system of streaming, viz.

- (i) At the end of standard VI a pupil passed either into the Advanced Grade or Ordinary Grade depending on his performance in the standard VI examination;
- (ii) If a pupil, having obtained an Ordinary Grade pass, wished to follow the Advanced Grade course, he could do so by repeating standard VI with a view to obtaining an Advanced Grade pass;
- (iii) For the subnormal pupil who could not benefit in either the Advanced Grade or the Ordinary Grade, a school leaving course called "Standard VI School Leaving Certificate - Special Classes" was offered;

Because the pupils were placed in their respective streams according to their abilities, pupils were encouraged to stay on longer at school. It was estimated that immediately after streaming the total number of candidates in the Junior Certificate examination had increased by nearly 25%. (58)

TABLE 2.8  
PROMOTION REQUIREMENTS UNDER THE SYSTEM OF STREAMING IN WHITE SCHOOLS : COMPARATIVE REQUIREMENTS FOR INDIAN PUPILS

Pass Mark

Std	Promotion		Leaving Certificates	
	<u>All Schools</u>		<u>Indian Schools</u>	
VII	Main Language	33½	Main Language	30%
	Four other subjects	33½ each	Four other subjects	30% each
	Aggregate of 7 subjects	40%	Aggregate of 7 subjects	35%
	<u>All Schools</u>		<u>Indian Schools</u>	
IX	Main Language	33½%	Main Language	33½%
	Four other subjects	33½% each	Four other subjects	30% each
	Aggr. of 6 subjects	40%	Aggr. of 6 subjects	35%

(Source : Natal Education Department : Schools Hand Book) p. 171

### 2.5.2.6 External Examination Procedures Prior to Streaming

In Natal there were three external examinations, viz. the Natal Standard VI Examination, the Natal Junior Certificate Examination and the Natal Senior Certificate Examination.

Standard VI examination for many decades was the terminal point of the primary school. It was abolished as an external examination for White schools in 1948 on the recommendation of the Wilks Committee.<sup>(59)</sup> Recommending the retention of the Natal Standard VI Examination for Coloured and Indian pupils the Wilks Committee remarked. "Standard VI marks the end of primary education for Coloured and Indian children, for most of them the stage at which they will leave school, but for a very fair number the point of transition to the High School. For that reason and because in recent years a rapidly increasing number of non-European pupils has been entering for the Natal Standard VI Examination, it appears necessary for the time being to retain the examination, which has a similar function still to serve for Coloured and Indian children to that which it served in the European schools for the past quarter of a century."<sup>(60)</sup>

The Natal Junior Certificate Examination was instituted in 1951 and was retained as an external examination for the White pupils until 1966. This examination was, however, retained for the Indian pupils. Natal established its own Senior Certificate examination in 1953.

#### 2.5.6.1 Standard VI Examination for Indian Pupils : 1953 - 1965

In the Natal Standard VI Examination there were two categories of pass requirements, viz.: the Continuation Certificate pass requirement which enabled a pupil to continue with his schooling and the School Leaving Certificate which was meant for the school leaver.

The requirements for a pass were:



(a) to gain a Continuation Certificate a candidate had to:

- (i) pass in English A or Afrikaans A
- (ii) pass in at least four other subjects; selected from arithmetic, second language/health education, history, geography and general science;
- (iii) obtain a minimum aggregate of 360 marks out of a possible 950 marks.

The pass marks were 40% in Main Language, 33 $\frac{1}{3}$ % in Second Language/health education and 35% in the other subjects.

(b) to obtain a School Leaving Certificate a candidate had to:

- (i) pass in English A or Afrikaans A;
- (ii) pass in at least three other subjects;
- (iii) obtain a minimum aggregate of 270 marks.

Marks below 20% of the maximum in any subject were excluded from the aggregate.

It will be noticed that health education was an alternative subject to the Second Language. In Natal, Afrikaans was for the majority of White pupils, the Second Language. In Indian schools very few pupils were given the opportunity to take Afrikaans as the Second Language. Hence the majority of the Indian pupils were forced to take health education instead.

#### 2.5.2.6.2 The Natal Junior Certificate Examination

The promotion requirements for the Natal Junior Certificate Examination are set out in Table 2.9.

TABLE 2.9

PROMOTION REQUIREMENTS IN THE NATAL JUNIOR CERTIFICATE EXAMINATION

Pass Marks

Promotion		School Leaving	
Main Language	33½%	Main Language	30%
Four other subjects	33½% each	Four other subjects	30% each
Aggregate of 7 subjects	40%	Aggregate of 7 subjects	35%

The examination subjects for the Natal Junior Certificate Examination were : English, Afrikaans, Latin, history, geography, arithmetic, mathematics, housecraft, biology, physical science and bookkeeping.

Pupils had to offer seven subjects in all. In 1962 only 78 Indian pupils out of 2 242 candidates took Afrikaans for the Junior Certificate Examination, while 2 192 candidates took Latin. In Table 2.10 the position of Afrikaans in relation to Latin in Indian schools is shown.

TABLE 2.10

NUMBER OF CANDIDATES WHO TOOK EITHER AFRIKAANS OR LATIN IN JUNIOR CERTIFICATE EXAMINATION BETWEEN 1962 AND 1965

Year	Afrikaans		Latin	
	No. of Candidates	%	No. of Candidates	%
1962	78	3,4	2 192	98,8
1963	203	7,5	2 508	93,6
1964	311	10,5	2 827	95,9
1965	345	8,9	3 547	92,5

(Source : Department of Indian Affairs, File No. 10/16/1/10)

Although the number of Indian candidates taking Afrikaans increased during 1962 to 1965, Latin was still taken by an average of 95,2% of the candidates in the Natal Junior Certificate examination during the same period. Although Latin was, for many centuries regarded as a discipline by traditional beliefs as necessary for the training of the mind, yet for practical purposes in the South African context it is worth considering whether 95,2% of the Indian candidates in the Natal Junior Certificate examination preferred disciplining their minds to the practical value of using Afrikaans in their day-to-day lives.

#### 2.5.2.6.3 The Senior Certificate (School Leaving) and the Matriculation Exemption Certificate Examinations

##### Historical perspective

Since the Matriculation examination played, and still continues to play, a vital role not only in the educational sphere but also in the economic and social spheres of our lives, it will be useful to preface this section with a very brief reference to the historical development of the Matriculation examination and trace its evolution to the present time.

The first Matriculation examination was conducted in 1874. During the first fifty years the University of the Cape of Good Hope was the sole examining body. In 1918 the Joint Matriculation Board, a newly formed body, took over the control of the Matriculation examination from the University of the Cape of Good Hope. In its first examination the Joint Matriculation Board required a pass in each of six subjects made up as follows: (1) three compulsory subjects consisting of (a) an official language on the A grade, (b) mathematics,



(2) one science; (3) two further subjects from a list of eleven subjects.<sup>(61)</sup> The minima required were: 30% (increased to 33½% in 1931) in each subject and 40% in the aggregate. Soon other changes were effected. Among these were, French and German were allowed as alternatives to Latin. Candidates passing in five subjects and obtaining the required aggregate were allowed to take supplementary examination in the subject failed.<sup>(62)</sup>

The Matriculation examination, is in essence, a university entrance examination. In practice it also served as a school leaving examination for over 70% of the candidates who took the examination.

Though these candidates did not wish to enter a university, their needs were often sacrificed in the interests of the 30% who went to the university. For over a hundred years it has been the sole measuring device for selecting students for university education.<sup>(63)</sup>

During the 50 years when there was only one examination body (first the University of the Cape of Good Hope and then the Joint Matriculation Board) certain changes to the requirements of the examination were made. According to Malherbe<sup>(64)</sup> these changes have been possible causes of fluctuations in the percentage of passes. The first syllabus of the Matriculation examination taken in 1874 consisted of: a component knowledge of English, Latin, arithmetic, algebra and geometry. These constituted the central core of compulsory subjects required from everybody who wanted to enter the public service. There were two optional subjects to be chosen from history, Greek and Dutch or a modern language. The pass mark for an individual subject was 20% in the literary subjects and 25% in mathematics.

The aggregate to be attained was at least 33 $\frac{1}{3}$ % of the total marks. After 1902, history was awarded 250 marks instead of 200 marks, and the number of marks for mathematics was decreased from 800 to 600 marks. (65)

In 1923 a supplementary examination was introduced offering a second chance to candidates who, in the previous November-December examination had failed in one subject only and gained an aggregate mark required for a pass.

Throughout its early history, the Matriculation examination was fraught with conflict between the interests of the schools that had to cater for the many, and the interests of the universities that catered for the few. In the 1890s there appeared a struggle on two fronts- a struggle which dogged the South African educational scene for a quarter of a century. The first was between the universities and the education departments, and the second was between the interests of the intellectual elite, who had to be trained for the professions and leadership, and the interests of the rest whose formal education ended with their school days. (66)

Even as late as 1974, the De Vries Commission made the following criticism of the Matriculation examination. (67)

"About 47% of the school-leaving population has the capacity for full secondary education and only one-third of this percentage, i.e. 15% of the school population has the aptitude for University education. For the sake of this small percentage and their future, the whole secondary education is straight-jacketed by and through the system of the J.M.B. and matriculation examination, with the result that justice cannot be done to other equally important objectives of secondary education."

The long standing struggle between the Joint Matriculation Board and the education departments eventually led to the various education departments conducting their own Senior Certificate examinations. The Transvaal and the Education Departments set up their own Senior Certificate examinations in the early 1920s. In the thirties the Union (National) Department of Education and the Orange Free State Education Department followed suit. The Natal Education Department was the last of the education departments to introduce its own Senior Certificate in 1953. During recent years, separate Senior Certificate examinations were instituted for Indians, Coloured and Bantu candidates under their own respective Departments.

However, with the various education departments instituting their own examinations, the Joint Matriculation Board still controls entrance requirements to the universities by establishing minimum pass requirements, approving syllabi, appointing its own external moderators and establishing norms.

Commenting on the fluctuating Matriculation results of the first fifty years of its existence Malherbe<sup>(68)</sup> remarks:

".....it is clear that chance was more powerful in determining the number of passes and failures than any efforts of the examining body to maintain consistency in the standards of the matriculation examination during that time. Such chance variations also undoubtedly had serious social and economic consequences for the individual concerned. A



variation of say 10% in the failure rate from one year to another must have involved the careers of a few hundred students at a time-determining as it did, whether they could go to university or not.

The fortuitous fact that they were born in a particular year made all the difference."

With the emergence of several examining bodies further difficulties were encountered. Pass and failure rates not only varied from year to year but also from authority to authority.

Malherbe illustrates the changing pass and failure rates in the Matriculation examination from 1925 to 1972 and remarks that the pass rates not only fluctuated from year to year, but also that they, (under the different examining departments) sometimes moved in opposite directions in the same year as the result of a change in the regulations applicable to all examining bodies.<sup>(69)</sup>

It was no doubt that these seemingly random variations in the pass rates were due to changes in the regulations determining the minimum pass marks both in individual subjects and in the aggregate and also to the grouping of compulsory subjects. Prior to March 1931 candidates could qualify for Matriculation under two sets of conditions - (a) 'Interim' regulations and (b) 'New' regulations. Under (a) subjects were divided into three groups. Candidates had to obtain at least 30% in each of six subjects and a minimum of 1 320 marks in the aggregate. Under (b) subjects were divided into six groups. A candidate could obtain a Matriculation certificate by passing either in five or six subjects. If he took five subjects he was not allowed to include any of the subjects from the sixth group which consisted

mostly of subjects of a practical nature, such as book-keeping, typing, music, mechanical drawing, etc.; and he also had to take three of the subjects on the higher grade. Both those taking five, and those taking six subjects, had to attain 40% in each subject to pass, but there was no aggregate minimum.

In November 1931 further changes were effected, the most important of which was that the pass mark for individual subjects was reduced from 40% to 33½% and an aggregate pass mark of 40% was stipulated.

According to Malherbe the main effects of these changes were: there was a slight increase in the percentage of passes in the Joint Matriculation Board's examinations and also in the passes of the Cape examinations after 1932. In the Transvaal, however, the percentage of passes declined from about 70% in 1935 to below 60% in 1937. During the early years of the second world war, the percentage of passes in the Transvaal increased while those of the Cape and of the Joint Matriculation Board declined. (70)

In November 1942 changes were introduced in the 'interim' regulations. The pass mark for individual subjects was raised from 33½% to 40%. A candidate was, however, allowed to pass in only five instead of six subjects. The result was that over the next few years there was a slight decrease in the percentage of passes in the Joint Matriculation Board's examination, and in the Cape and Transvaal examinations, whereas the percentage of passes in the Orange Free State increased dramatically from 48% to 62% at the same time.

In 1948 an additional condition was introduced to the effect that among the compulsory subjects there was a choice between a third language and mathematics. Also the minimum aggregate was raised



from 700 to 780 marks. During the next few years this extra condition placed the Transvaal on a plateau for several years with over 70% passes, while the Cape and Orange Free State oscillated within a range of between 60% and 65% passes and Natal fluctuated with about 55% passes and exceeding only once, viz. in 1956.

In Natal, the Indian candidates were severely handicapped with the compulsory requirement of mathematics or a third language. Under the Natal Education Department 98% of the Indian candidates took Latin as the second language. Afrikaans was taken by only a very few candidates. In view of the limited choice in the second languages, the majority of Indian candidates had no option but to offer mathematics in place of a third language. These were the two subjects that caused many candidates to fail.

The option of a third language in place of mathematics boosted the pass rates in Afrikaans medium schools because apart from English, Afrikaans and mathematics, such schools opted for the "less lethal subjects, e.g. biology and German". (71)

The raising of the aggregate from a minimum of 780 to 800 marks in 1950 did not have any appreciable effect on the provincial examinations. However, when the minimum for the aggregate was raised from 800 to 1 000 marks in 1960, i.e. from 40% to 45%, the results of this were clearly seen in the drop in the percentage of passes in the Transvaal examinations as well as in the Joint Matriculation Board examination. The rapid all-round increase in the number of Matriculation exemption passes in 1971 was due to a change in the requirements by which it was possible for a candidate to obtain Matriculation exemption without having passed either in mathematics or



in a third language. The relaxation in the regulations had a beneficial effect on the Indian candidates from 1972 onwards. This is a point to which further attention will be paid in the next chapter.

To conclude this section on the evolution of the Matriculation examination, it will be worth quoting in full what a former Director of Education in New Zealand had to say on the changing examination standards. (72)

"It is usual to speak of examinations as hurdles or gateways, but the metaphor is deceptive in one respect. Gates and barriers are relatively fixed things, but examination standards tend to constantly be on the move. The name of an examination, to be sure, stands firm to all the winds that blow, but its meaning, its value, drifts before any breeze. This change in the standards of an examination is difficult not only to prove, but even to become aware of. To the pupils passing through it no less than to the man in the street a country's examination system seems fixed and stable as the stars, and no less awe-inspiring. Glance even casually at its history and the eternal quality vanishes, and it seems as haphazard, shifting and uncertain of itself as any institution could well be. Prescriptions change, marking systems change, purposes change, examinations grow, flourish and die; and yet at any given moment the system has all the sanctity of immutable antiquity and its standards are verities to be defended with one's life."

#### 2.5.2.6.4 The Natal Senior Certificate Examination: 1953 to 1965

In 1953 the Natal Education Department introduced its own Senior Certificate Examination. The regulations governing the Senior Certificate Examination in that year were as follows:<sup>(73)</sup> The subjects to be offered by a candidate had to be six in number selected in the following manner: (i) English A or Afrikaans A, (ii) An official language (Afrikaans or English) not taken under (i) above, on either the A or B grade, or Zulu A or Southern Sotho A (for pupils in Native schools). In special circumstances the Director of Education allowed an alternative subject to the official language. This alternative subject had to be another language from section A of the list of subjects, (iii) one subject from physical science, physics, chemistry, mechanics, biology, botany and zoology. (iv) Three other subjects selected as follows: (a) mathematics or mathematics higher or a language other than English or Afrikaans, (b) one other subject from section A of the list of subjects, (c) one other subject chosen from either Section A or B of the list of approved subjects. In addition oral tests in Afrikaans B, English B, French, German and Zulu B formed part of the examination. Marks were to be allocated by the teachers concerned. The oral marks were submitted to the Education Department. Maximum marks for the various subjects were assigned as follows: English A, Afrikaans A, Southern Sotho A, Zulu A and mathematics higher; 400 marks each. All the other subjects were assigned 300 marks each.

#### Requirements for a pass in the Natal Senior Certificate Examination

(a) The minimum mark required for a pass in English A, Afrikaans A, Zulu A, Southern Sotho A or mathematics higher was 150 and 100 marks in all other subjects.

- (b) In order to obtain a Senior Certificate, a candidate had to in one and the same examination: (i) pass in an official language on the A grade; (ii) pass in four other subjects (iii) obtain a minimum aggregate of 760 marks.

A candidate who took two languages on the A grade and failed in one of them was considered to have passed in that language on the B grade, if he obtained at least 30% of the marks in that subject. A candidate who took mathematics higher and failed to obtain the required minimum for a pass was considered to have passed mathematics if he had obtained at least 30% of the marks in mathematics higher. No marks below 25% in any subject was added to a candidate's aggregate.

Requirements for the Natal Senior Certificate Matriculation Exemption

In order to obtain the Natal Senior Certificate Matriculation exemption a candidate had to: (a) conform to the requirements for a pass in the Senior Certificate examination, (b) obtain at least 40% in each of the four subjects under (i) to (iv) above, (c) pass in a fifth subject selected from Section A of the list of approved subjects, and (d) pass in either Afrikaans or English or in mathematics or mathematics higher.

Candidates who had obtained a minimum aggregate of 1 260 marks and otherwise conformed to the requirements of a pass were designated as having passed with merit. All candidates who had fulfilled the minimum requirements of the Joint Matriculation Board had their certificates endorsed with a declaration of exemption signed by the Secretary of the Board.



In 1963 minor changes were made to the requirements for passing the Natal Senior Certificate examination. The pass mark in individual subjects was set at 33½% in all subjects. The 1953 pass requirements were 37,5% in English A, Afrikaans A Zulu A, Southern Sotho A and mathematics higher and 33½% in all other subjects.

2.5.2.6.5 Changes brought about as a result of the introduction of streaming in White schools: 1966 to 1971

When Indian education was taken over by the Department of Indian Affairs in 1966, Indian candidates continued to write the Natal Senior Certificate examination set by the Natal Education Department. From 1972 to 1974, however, the Indian candidates wrote the same examination as the White candidates in Natal, but under the Senior Certificate examination rules of the Department of Indian Affairs.

In 1965 the Natal Senior Certificate examination was based on the system of streaming (Advanced and Ordinary Grades). Since the system of streaming only applied to the White candidates, they were allowed to write the examination on either the Advanced or Ordinary Grade, depending on which stream they were classified at the beginning of the year in which they were in Standard VII. In the absence of any form of streaming in Indian schools, all candidates from 1965 to 1967 had no option but to write on the Advanced Grade.

Separate examination papers were set for the Advanced and the Ordinary Grade. However, certain papers were set as common papers for both the grades. Latin was set only on the Advanced Grade. Under the system of streaming it was not possible for a candidate to write

certain subjects on the Advanced Grade and others on the Ordinary Grade. All six or seven subjects had to be written on a particular grade, except where the subjects were set only on one common grade.

The pass requirements for the Senior Certificate examination under the system of streaming, differed only very slightly from the rules for this examination prior to streaming. The following were the most important changes in the rules governing the Natal Senior Certificate examination under the system of streaming. (74)

(i) Prior to streaming all candidates had to offer only six subjects. Under the 1965 rules, candidates were allowed to offer either six or seven subjects. In the seven subject examination if a candidate obtained less than 25% of the maximum marks in one or more subjects, the marks in the subject in which the lowest marks were obtained were excluded from the aggregate. (ii) In the 1965 rules a candidate who offered additional mathematics received separate symbols for mathematics and additional mathematics. Marks below 33½% in additional mathematics were not counted towards the aggregate. Prior to this, a candidate could take mathematics higher, and if he failed to obtain 150 marks out of 400 marks, he was considered to have passed mathematics, provided he obtained at least 30% of the marks in mathematics higher. (iii) In the 1965 rules the classification of pass was: Senior Certificate - 760 marks and 850 aggregate marks for a six subject and seven subject examination respectively. To pass with merit, the marks were 1 140 and 1 250 for the six subject and seven subject examination respectively. Prior to this date the aggregate for the six subject examination was 760 marks and to pass with merit the requirement was 1 260 marks in the aggregate.



(iv) For Matriculation exemption the only difference appears to be that, after streaming the minimum aggregate was set at 860 marks for a six subject examination and 950 marks for a seven subject examination. No specific aggregate is mentioned in the 1953 rules. Presumably it was the same aggregate of 760 as for the Senior Certificate examination.

## 2.6 SOME ASPECTS OF INDIAN SECONDARY EDUCATION UNDER THE DEPARTMENT OF INDIAN AFFAIRS DURING THE PERIOD 1966-1977

In this section attention will be paid to the outcome of the transfer of Indian education from the provinces to the Department of Indian Affairs, with special emphasis on:

- (i) The introduction of streaming in Indian Secondary schools and the subsequent introduction of the new system of differentiated education;
- (ii) The position of Afrikaans as the second official language in Indian Schools;
- (iii) The promotion and retardation requirements of internal examinations and the rules governing the external examinations under; (a) the system of streaming, and, (b) the new system of differentiated education.

Following the pattern of separate development, education of the Indians was transferred by Act 61 of 1965 from the provinces to the Department of Indian Affairs with effect from 1 April 1966.

In respect of the school courses and the external examinations the Indians Education Act 61 of 1965, Section 21(4) made the following provisions:



"Until the Minister otherwise determines, the Department of Education, Arts and Science, shall institute the courses for the education and training of persons in special schools, homes, vocational schools, schools of industries and reform schools and conduct examinations in respect thereof, and a provincial administration shall institute courses for the education and training of persons in other State schools and State-aided schools, and conduct examinations in respect thereof, in the same manner in which it would have done if, the control of such education were still vested in that Department or, as the case may be, in the provincial administration."

#### 2.6.1 The School Curriculum

Prior to the transfer of Indian education to the Department of Indian Affairs, Division of Education, the secondary school curriculum was the same for all pupils, regardless of their aptitudes and abilities. It was of an academic grammar school type and was not liberal enough in the subjects offered.<sup>(75)</sup> Commenting on the restricted secondary school curriculum, a former Chief Inspector of Indian Education said:<sup>(76)</sup>

"not every child who passes Standard VI is fit for the only type of secondary education now available in Indian Secondary Schools, the purely academic one."

In his report on the transfer of Indian education to the Department of Indian Affairs, Mr. P.R.T. Nel<sup>(77)</sup> felt that it was essential to introduce "differentiated courses and comprehensive or composite high schools which would make it possible better to fit the education to the child and to the needs of the community."

One of the first tasks of the Division of Indian Education was the introduction of differentiation in Indian secondary schools. In a circular announcing the introduction of differentiated education in Indian schools the Director of Indian Education said: (78)

"In our opinion the high failure rate in Indian Schools is in no small measure due to the fact that pupils have to contend with subject matter and courses beyond their capabilities. It is felt therefore that suitable courses should be provided by differentiating courses and subject matter."

The two-stream system of education was introduced in Indian secondary schools in March 1967. The two streams were called "Advanced Grade" and "Ordinary Grade" and were based entirely on the pattern of the Natal Education Department. Differentiation commenced in Standard VII and continued to Standard X. Streaming was done at the end of Standard VI based on the pupil's overall performance in the Standard VI examination. However, when the system of streaming was introduced in 1967 in Indian schools, it was applied with immediate effect to all the pupils in Standards VII to X in 1967. In the absence of any "selection" examination for the pupils already in Standards VII to X in 1967, the pupils were voluntarily placed in either the Advanced Grade or Ordinary Grade. In the final examination of 1967, all Standard VII pupils were streamed on the basis of their Standard VI examination results, while certain pupils in Standards VII, VIII and IX who had failed the previous year had their failures condoned into Ordinary Grade passes. (79) In view of the voluntary method of streaming applicable to pupils who were already in Standard VII to X in 1967, very few pupils opted for the Ordinary Grade course.



The result was, that in 1967 out of a total of 1 617 candidates in the Natal Senior Certificate examination, only 16 candidates elected to write the examination in the Ordinary Grade. As normal streaming evolved over the years in the secondary schools, the position improved and the pupils were classified into the Advanced and Ordinary Grade based on the overall results of the Standard VI examination.

With the introduction of streaming, the list of subjects was extended to include subjects of a more practical bias such as typewriting, industrial arts, and housecraft.

#### 2.6.1.1 Afrikaans

As discussed elsewhere in the present study, Indian pupils under the Natal Education Department were severely handicapped in the choice of a second language. Afrikaans was not a compulsory official language for Indians. On transfer of Indian Education, the Department of Indian Affairs immediately set about to remedy this position. At its meeting in January 1968, the Joint Matriculation Board decided that all candidates with the exception of Indian candidates, had to pass both official languages (Afrikaans and English) as from 1972 in order to qualify for Matriculation Exemption. For Indian candidates this rule came into effect as from the examination of 1974. (80) The Department therefore decided that Afrikaans would become a compulsory examination subject starting in Standard VI in 1968 and progressing year by year until it became compulsory in Standard X in 1974.

By means of orientation courses, the Department of Indian Affairs was in a position to provide sufficient teachers to teach Afrikaans up to the Standard X level. Presently the two colleges of education and the Faculty of Education of the University of Durban-Westville



provide for specialisation courses in Afrikaans.

The position of Afrikaans has improved to such an extent in Indian schools that at present it is a compulsory second language in all Indian schools up to the Standard X level.

#### 2.6.1.2 The New System of Differentiated Education

One of the ten principles of the National Education Policy Act of 1967 was that: <sup>(81)</sup>

"Education shall be provided in accordance with the ability and aptitude of, and interest shown by the pupil, and the needs of the country, and that appropriate guidance shall, with due regard thereto be furnished to all pupils."

Although the National Education Policy Act of 1967 applies to the White population, the Department of Indian Affairs decided to go along with the White education departments and introduced the new system of differentiated education in Indian schools in 1973.

The new system of differentiated education is divided into four phases, namely, the junior primary phase, the senior primary phase, the junior secondary phase and the senior secondary phase. In the accompanying diagram the system as applicable to Indian education is illustrated.

The programme in the primary phase has not changed to any great extent. New syllabuses are envisaged for this phase. In the junior secondary phase which begins in Standard V, subject teaching, instead of class teaching is applied in order to orientate the pupils to secondary school approach.

Standard V is a crucial standard for the pupils, for it is a transition

THE NEW SYSTEM OF DIFFERENTIATED EDUCATION

AGE	SCHOOL PHASES		CLASS	COURSES	
				ACADEMIC COURSE	PRACTICAL COURSE
6	PRIMARY PHASE	Junior	Cl.(i)	Pupils follow ordinary course instruction ↓ Pupils follow ordinary course of instruction ↓ Pupils follow ordinary course which comprises compulsory examination subjects/non-examination subjects ↓	
7			Cl.(ii)		
8		Std. 1			
9		Senior	Std.2		
10	Std. 3				
11			Std. 4		
12	SECONDARY PHASE	Junior	Std. 5		
13			Std.6	Pupils follow ordinary course which comprises:  Compulsory examination subjects Optional examination subjects Compulsory non-examination subjects	Pupils may follow the Practical Course which comprises: compulsory examination subjects Practical subjects Compulsory non-examination subjects  Pupils may select and follow one of the following lines of Study:  Commercial Home Economics Technical
14			Std. 7	(Pupils are advised to choose subjects which will benefit them in the field of study which they plan to follow at a later stage). ↓	
15		Std.8	Pupils select and follow a FIELD OF STUDY. Such a field comprises:  Official languages Subjects characteristic to the field Supporting subjects Compulsory non-examination subjects	Pupils follow one of two lines of study  TECHNICAL GENERAL  Courses comprise:  Compulsory examination subjects  i.e. Official languages Background subjects Practical subjects  Compulsory non-examination subjects	
16		Std.9	Fields include:  NATURAL SCIENCES HUMANITIES COMMERCIAL GENERAL TECHNICAL HOME ECONOMICS		
17		Std.10	These courses may lead to University Entrance		

(Adapted from EDUCATION NEWS FLASHES : Transvaal Education Department.)



year to fully-fledged secondary education. At the end of Standard V, the pupils are classified into either the academic high school course or into the practical vocationally orientated course.

In Standard VI and VII, apart from the two official languages, the pupils have to take mathematics, general science, history geography, a technical subject (such as industrial art, technical drawing, workshop practice, housecraft, home economics and needlework and clothing) and two other subjects selected from accountancy, typewriting, health education, art, music, Hindi, Arabic and Tamil.

Education in the junior secondary phase is generally formative and exploratory to enable the pupil to select a field of study in the next phase.

In the senior secondary phase a candidate has to follow one of six courses or fields of study viz. general, humanities, commercial, technical, natural sciences and home economics. The examination subjects for this phase are divided into six groups: the official languages, mathematics; natural sciences; third languages; human sciences; and subjects comprising a long list covering commercial, technical, housecraft, art and music subjects.

The Department of Indian Affairs provides lists of subject-sets made up of the two official languages and four other subjects selected and arranged in such a manner that they satisfy the Joint Matriculation Board's group requirements. Subject-sets are also provided for pupils who do not wish to obtain Matriculation exemption. (82)

Subjects in the senior secondary phase are offered on the Higher Grade or the Standard Grade. Most of the Group F subjects are offered



on the Standard Grade only. The only subjects from this group which are offered on both the Higher Grade and the Standard Grade are: accountancy, technical drawing and home economics.

For the pupils who cannot derive sufficient benefit from the instruction normally provided in the normal academic course, a Practical Vocationally orientated course is offered. Although the pupils in the Practical Course take basically the same subjects as the other pupils the syllabi for these pupils are differentiated in subject content and approach. At present this course ranges from Standards VI to VIII.

In selecting a field of study, the pupils are given adequate guidance by the principals and their staff. However, the final choice of a field of study and the relevant subject-set rests with the pupil and his parents.

#### 2.6.1.3 School Guidance Service

School guidance as envisaged in the new system of differentiated education plays an important role, and in fact, it is regarded as the corner-stone of the new education programme.

The Department of Indian Affairs has appointed a Guidance Officer who is responsible for guidance and counselling in schools. Schools are provided with trained guidance teachers who function under the supervision of the Guidance Officer. The guidance teachers are responsible for psychological and vocational guidance in the schools.

The Guidance personnel are assisted by the school psychological personnel in attending to various problems related to school work.

### 2.6.2 Examination

Under the Department of Indian Affairs, there are two types of formal examination, namely, the internal school-based examination which is conducted by the principals and their staff, and the external examination, which is conducted by the Department of Indian Affairs.

The rules of procedure for conducting internal examinations are set out in the departmental circular No. 1.E.12 of 1966 issued to all schools on 3 June 1966.

The rules of procedure are based on the rules of procedure of the Natal Education Department with very minor amendments. In respect of the internal examinations, the Department of Indian Affairs allows the schools much freedom in the conduct of examinations. All schools are issued with the curricula and common core syllabi. Examination papers in the various subjects have to be based on these core syllabi.

Normally two examinations are held internally in the year. One examination is held towards the end of the second school term and the final examination is held towards the end of the fourth school term. Not more than one-third of the total marks in a subject is allowed to be assigned to the half-yearly examination.

Practical and oral marks in certain subjects form an integral part of the examination.

All examination papers in the internal school examinations have to be moderated by the principal or his deputies. It is required that at least 10% of the examination scripts be moderated by the principal or his duly appointed deputy to ensure that the marking had been thorough and equitable. If the principal feels that the marking has been either too lenient or too severe, adjustments either by lowering



or raising the marks are usually made to the marks.

After the final examination, the principals are requested to fill in the Promotion and Retardation schedules with marks obtained by each and every pupil who wrote the examination. Subjects in which a pupil failed are indicated by a red ring drawn round the subject(s). These schedules are submitted to the Inspector of Education (Circuit) who checks the schedules and either accepts or rejects the principal's recommendations in respect of pupils requiring special consideration.

In terms of section 21(4) of the Indians Education Act 61 of 1965, the provinces were, until the Minister determines otherwise, responsible for conducting examinations for the Department of Indian Affairs, in the same manner in which it would have done if, the control of education were still vested in that province. At the time when this Act was passed, the Natal Education Department conducted two external examinations, namely, the Natal Junior Certificate and the Natal Senior Certificate examinations for its White and Indian candidates. However, the Natal Education Department abolished the external Junior Certificate examination at the end of 1965. This meant that the Division of Education of the Department of Indian Affairs, on take-over of Indian education in April 1966, had to conduct this examination. For the purpose of conducting the external examinations, it became necessary for the Department of Indian Affairs to establish its own Examinations Board. One of the first functions of the Examinations Board was to phase out the Standard VI external examination. The Junior Certificate examination remained an external examination until 1972 when it was abolished as an external examination.



From 1973 onwards the Junior Certificate examination became a wholly internal examination. (83)

At present all examinations up to and including Standard IX are internal examinations. The Senior Certificate examination is the only external examination.

### 2.6.3 Promotion and Retardation procedures under the Department of Indian Affairs

#### (i) Internal Examinations under the system of Streaming

When the Department of Indian Affairs took control of Indian Education in 1966, it decided to follow very closely the promotion and retardation procedures of the Natal Education Department. On 3 June 1966, the Department of Indian Affairs issued Circular No. I.E.12 of 1966 in which it set out the promotion and retardation procedures. Since the procedure for the conduct of internal examinations was very similar to those set out under the Natal Education Department, only major changes will be considered in this section.

#### 2.6.3.1 Standard VI

When streaming was first introduced in Indian schools in 1967, it was felt that in view of the wide variations of standards of work done by the pupils, of the type of examination papers and of standard of marking in different schools, some measure of control was necessary. Therefore the following procedure was adopted:

For the examination at the end of 1967, all examination papers in the various subjects were controlled. The Department of Indian

Affairs appointed the examiners and the moderators. Mark schemes were drawn up by the examiners and were issued to all schools with Standard VI classes.

The time-table for the examination was set by the Department. The examination scripts were marked by the teachers of the schools concerned, according to a marking scheme. Inspectors of Education controlled the working by scrutinizing some of the marked scripts.

Gradually, the Standard VI controlled examination was phased out and in 1970 it became a wholly internal examination. In 1970, Afrikaans was made a compulsory second language in Standard VI from which date health education was not accepted as a substitute for Afrikaans. The pass requirements for Standard VI were similar to the pass requirements of the Natal Education Department. (see Section 2.5.6.1)

#### 2.6.3.2 Standard VII and IX

In Standards VII and IX the promotion requirements were as follows: a candidate taking the Advanced Grade course had to obtain at least 33 $\frac{1}{3}$ % in English, 33 $\frac{1}{3}$ % in at least four other subjects and an aggregate of at least 40% to be promoted into the Advanced Grade. If such a candidate failed to obtain the minimum requirements for the Advanced Grade pass, he was promoted into the Ordinary Grade, provided that he obtained at least 33 $\frac{1}{3}$ % in English, 30% in each of four other subjects and an aggregate of 35%.

A candidate taking the Ordinary Grade course had to obtain at least 33 $\frac{1}{3}$ % in English, 33 $\frac{1}{3}$ % in each of four other subjects and an aggregate of 40% in order to pass.

(ii) Internal examination under the new System of Differentiated Education

While the general procedures for conducting internal examinations remained unaltered, the new system of education made it necessary for changes in the promotion and retardation procedures.

Under the new system of differentiated education, pupils are classified into two separate grades based on the results of the schools' internal Standard V examination. The subject grouping and the minimum requirements for classification are as follows: (84)

<u>Subject Grouping</u>	<u>Standard V</u>
Group 1	: Main Language
Group 2	: Second Language
Group 3	: General Mathematics and General Science
Group 4	: History and Geography

The Minimum Requirements for Classification Standard V

Groups	Pass into Std VI Academic Course		Pass into Std VI Practical Course	
	Marks	Percentage	Marks	Percentage
1. Group 1	135 marks	45%	105 marks	35%
2. Each of two of the remaining groups	80 marks	40%	70 marks	35%
3. Aggregate	450 marks	50%	315 marks	35%

A pupil who is promoted into the Standard VI Practical Course or who fails, may repeat Standard V in order to continue in the Academic Course of study.



The Practical Course is planned to provide for the educational needs and welfare of those pupils whose aptitudes and interests are of a more practical nature and for whom the ordinary academic course does not cater effectively. It is expected that these pupils, who comprise approximately 20% of the school population<sup>(85)</sup>, will be better able to realise their potentialities to the optimum in the Practical Course. According to Jooste<sup>(86)</sup>, the pupils in the Practical Course are of the following types:

the less gifted (less able pupils with modest endowment) ;

the underachievers (but possibly with average ability) who cannot progress in the ordinary academic course on account of, inter-alia, emotional constraint and the inability to dissociate themselves from their feelings;

When the new system of differentiated education was introduced in schools in 1973, it was felt that such pupils rarely advance beyond the Standard VIII level, and on reaching the age of sixteen years, usually leave school permanently with or without the Standard VIII certificate. However, there has been a re-appraisal of this issue with the result that some White education departments have already extended the Practical Course up to and including Standard X. The Department of Indian Affairs has announced in a circular to schools that the Practical Course will be extended to the Standard X level, starting in Standard IX in 1978.

#### 2.6.3.3 Standard VI and VII : (Academic Course) Promotion Requirements

When the new system of differentiated education was introduced in

January 1973 in Indian schools, the Department allowed certain adjustments to be made in respect of the Standards VII and VIII pupils who were already on a course of study based on the old system of streaming in 1973. The old Ordinary Grade course in Standard VIII was allowed to continue until the end of 1973.<sup>(87)</sup> Pupils who entered Standard VIII for the first time in 1973 and failures of the previous year were the first batch of pupils to enter the new Senior Secondary Phase.

The following are the pass requirements in Standards VI and VII.<sup>(88)</sup> To pass from Standard VI Academic Course into Standard VII Academic Course a pupil has to:

- (i) obtain 40% in English,
- (ii) obtain 40% in each of three groups of subjects and obtain a minimum aggregate of 40%. If a pupil fails to obtain these minimum requirements he is promoted into the Practical Course Standard VII, provided he obtains a minimum of 30% in English and 30% in each of three groups of subjects and 30% aggregate.

To pass from Standard VII Academic Course into Standard VIII Academic Course, a pupil has to obtain the following minimum requirements:

- (i) 40% in English
- (ii) 40% in each of three groups of subjects,
- (iii) 40% in the aggregate.

If a candidate fails to obtain the above minimum requirements he is promoted into the Practical Standard VIII Course provided he obtains a minimum of 30% in English, 30% in three groups of subjects and



30% in the aggregate.

A pupil following the Academic Course in Standards VI or VII may repeat the Academic Course if he is promoted into the Practical Course if he wishes to continue his schooling on the Academic level.

#### 2.6.3.4 Standards VIII and IX Promotion Requirements

Standard VIII is the first stage of the Senior Secondary Phase. Pupils take six examination subjects in a particular study direction. The subjects for the examination are determined by a particular "*subject-set*" a pupil has chosen. Certain subjects are taken on the Higher Grade and others on the Standard Grade. Generally pupils taking the *subject sets* take a particular subject and the grade according to the requirement of the Joint Matriculation Board. Subjects on the Higher Grade carry a maximum of 400 marks each and the subjects on the Standard Grade carry 300 marks each. But Afrikaans as second language on the Higher Grade carries 300 marks. The requirements for passing are:

33½% in individual subjects and in the whole examination a candidate has to:

- (i) pass in English First Language on the Higher or Standard Grade,
- (ii) pass in *four* other subjects on either the Higher or Standard Grade,
- (iii) obtain a minimum aggregate of 720 marks.

A failure in a subject taken on the Higher Grade, except Afrikaans Second Language, is recognised as a pass on the Standard Grade, provided a candidate obtains a minimum of 100 marks in that subject.

In the case of Afrikaans, Second Language taken on the



Higher Grade, a mark of between 90 - 99 is recognised as a pass in Afrikaans Second Language Standard Grade.

A pupil is allowed to switch from a subject taken on the Standard Grade to the same subject on the Higher Grade, provided the pupil obtains a minimum of 180 marks (60%) in that subject on the Standard Grade as a final mark for the year. However the parents' wishes are respected in the choice of subjects and grades.

#### 2.6.3.5 The Practical Course - Standards VI to VIII

##### Promotion Requirements

For Standards VI to VIII Practical Course the subjects include three subjects in a particular direction of study. These directions are the technical direction, the commercial direction and the domestic science direction. All pupils have to take six subjects common to all, and three subjects of which at least two must be taken from the same direction of study. The subjects are grouped as follows:

Group 1 - English, Group 2 - Afrikaans, Group 3 - practical mathematics and general science, Group 4 - history and geography and Group 5 - three subjects in a particular direction of study.

The pass requirements in Standards VI to VIII are: <sup>(89)</sup>

- (i) 40% in English
- (ii) 40% in each of three of the remaining groups, and
- (iii) an aggregate of 40%.

A pupil following the Practical Course in Standards VI and VII, and who passes, may be promoted into the Academic Course in the next standard, provided he obtains at least 60% (180 out of 300) in English

and obtains an aggregate of 720 marks in groups 1, 2, 3 and 4 above. A pupil passing the Practical Course in Standards VI to VIII may repeat the Standards in the Academic Course if he wishes to continue with the normal Academic type of schooling.<sup>(90)</sup>

#### 2.6.4 External Examination Promotion and Retardation Requirements

##### (i) Under the system of streaming

There were two external examinations under the system of streaming, namely, the Junior Certificate examination and the Natal Senior Certificate examination.

##### 2.6.4.1 The Junior Certificate Examination

From 1967 to 1971 the Standard VIII Junior Certificate examination was wholly an external examination. Pupils following the Advanced Grade stream had to offer seven subjects.<sup>(91)</sup> In order to be promoted into the Advanced Grade a candidate had to obtain 33 $\frac{1}{3}$ % in English and in at least four subjects and an aggregate of 40%. A candidate taking the examination on the Advanced Grade could be promoted into the Ordinary Grade if he obtained 33 $\frac{1}{3}$ % in English, 30% in each of four other subjects and a minimum aggregate of 40%. There was provision in the rules, for a candidate who was promoted into the Ordinary Grade to repeat Standard VIII on the Advanced Grade, if he wanted to continue his schooling on the Advanced Grade.

##### 2.6.4.2 The Senior Certificate Examination

From 1966 to 1971 Indian candidates in Natal wrote the Natal Senior Certificate examination under the rules of the Natal Education Depart-



ment. The Senior Certificate examination during these years was controlled by the Natal Education Department.

With the establishment of its own Examinations Board in 1968, the Department of Indian Affairs decided to control its own Senior Certificate examination, however, from 1972 to 1974, the Department of Indian Affairs purchased the Senior Certificate examination papers from the Natal Education Department under the following conditions: (92)

- (i) The Natal Education Department would appoint European commissioners in Indian schools.
- (ii) The examination papers would be supplied direct to the commissioners appointed on the basis of figures supplied by the Department of Indian Affairs.
- (iii) The Indian candidates would follow the time table of the Natal Education Department.
- (iv) The Natal Education Department would appoint one European sub-examiner to each Indian marking committee to take charge of the marking.
- (v) The Natal Education Department would supply the marking memorandum.
- (vi) The Natal Education Department would appoint its own moderators to moderate sample scripts.
- (vii) Standard curves for Indian candidates for each subject over the previous five years, for the purpose of making statistical adjustments to the marks were to be supplied by the Natal Education Department.

Indian teachers were appointed to act as sub-examiners in the various subjects.



The rules for the Department of Indian Affairs Senior Certificate examination were set out in I.E. Circular No. 32 of 1971<sup>(93)</sup> These rules were virtually the same set of rules applicable to White schools in Natal. The pass requirements for the Departmental Senior Certificate and the Matriculation exemption remained unaltered. The only change from the Natal Education Department rules was the inclusion of Hindi and Arabic in the list of examination subjects.

Prior to the transfer of education of the Indians in the Transvaal, the Transvaal candidates were given a year mark in the various subjects. These year marks were taken into account in the final results in the Senior Certificate examination. When the Transvaal Indian candidates had to write the Senior Certificate examination of the Department of Indian Affairs with effect from 1973, the year mark was taken into account in determining their results. The Joint Matriculation Board agreed to include the year mark in respect of the Transvaal candidates,<sup>(94)</sup> for Matriculation exemption purposes. These rules and pass requirements were in force until the end of 1974 when the last candidates wrote the Senior Certificate examination under the old system of streaming into the Advanced and Ordinary Grades.

(ii) Under the New Differentiated Examination System

2.6.4.3 The Senior Certificate Examination

Under the new system of differentiated education, the Senior Certificate examination is the only external examination. In 1975 the Department of Indian Affairs introduced its own Senior Certificate examination. The first step towards the complete control of the Senior Certificate examination was the drawing up of the rules governing the Senior Certificate examination. These rules were approved by the Joint Matriculation Board. In its memorandum to the Joint Matriculation

Board, the Department of Indian Affairs set out details of the examination requirements, norms and standards based on the results of the previous five years and the condonation procedure. All syllabi used in Indian schools are based on national core syllabi. The Department of Indian Affairs is represented on all national syllabus committees. The Departmental subject committees are responsible for formulating syllabi for the various subjects, based on common core syllabi. All syllabi used in Indian secondary schools are subject to the approval of the Joint Matriculation Board.

The Joint Matriculation Board also acts as external moderators for all subjects taken for Matriculation exemption purposes. In this way standards are maintained to ensure that these conform to the standards of other education departments in the country.

The Department of Indian Affairs appoints examiners and sub-examiners from the ranks of Indian and White teaching personnel. Thus, for the first time in the history of Indian education, Indian teachers are given the opportunity of acting as examiners and sub-examiners.

Examination papers are set in the Higher and/or Standard Grades. All group F subjects except, accountancy, technical drawing and home economics are examined only on the Standard Grade. According to the rules<sup>(95)</sup> for the Senior Certificate examination the following group requirements are in force:

To obtain a Senior Certificate, a candidate for the examination as a whole shall be awarded a pass:

- (a) in individual subjects if he attains at least 133 marks on the Higher Grade (or 100 marks in Second language on the Standard Grade) and 100 marks on the Standard Grade, provided



that a failure in a subject on the Higher Grade, (except Second Language Higher Grade) may be converted to a pass on the Standard Grade if a minimum of 100 marks was obtained in such subject. In the Second Language on the Higher Grade 90 - 99 marks may be converted to a pass on the Standard Grade. The original marks obtained in such subject on the Higher Grade shall be used in calculating the aggregate.

- (b) In the aggregate, if he obtains at least 720 marks in the case of a six subject examination. In the case of a candidate offering seven subjects, the aggregate will be calculated according to the total of the six subjects in which the candidate gained the highest marks, provided (i) that both official languages on the Standard Grade or one on each grade be included in the six subjects;
- (c) In the examination on the whole if he: - (i) passes in the aggregate, (ii) passes First Language on the Higher or the Standard Grade, (iii) and passes in four other subjects. (96)

The above rules were in force until 1976. In 1977, the pass requirements in the individual subjects in the Higher Grade were raised from 133 marks out of 400 to 160 marks out of 400. (97)

#### Matriculation Exemption

The new differentiated Matriculation regulations which became operative in the November/December 1975 examinations were also applicable to the Department of Indian Affairs. The new regulations made the distinction between the matriculation and the school-leaving certificate more on the basis of the *standard of achievement in common subjects* than a participation in a greater variety of subject options. (98)



Thus, subjects may be taken on the Standard Grade or on the more demanding syllabus starting in the core subjects in Standard VIII. The examination papers of the two grades are different. The minimum for a pass on the Standard Grade is 33 $\frac{1}{3}$ % and 40% in the Higher Grade.

In order to obtain Matriculation exemption a candidate has to (i) offer at least six and not more than seven subjects chosen from the list of prescribed subjects. (ii) pass in at least five subjects in one examination, (iii) obtain an aggregate mark of at least 950, (iv) pass on the Higher Grade in at least three subjects chosen from groups A to E; with at least 40% in each, (v) pass in both official languages, at least one in the Higher Grade, (vi) offer at least one subject from each of four of the groups, provided that not more than four languages are offered. (99)

The Joint Matriculation Board also included the following provisos:

(i) only candidates wishing to enrol at a South African university for a B.Mus; a B.A. (Music); or a B.A. (Fine Arts) degree, shall be allowed to offer Music or Art on the Higher Grade from group E as one of the subjects to satisfy the requirements in (iv) above. In such cases the certificate shall be endorsed to the effect that the holder may only gain admission in the case of Music to the B. Mus. or B.A. (Music) degrees or, in the case of Art, to the B.A. (Fine Arts) degree. (ii) only candidates following a technical, an agricultural or a domestic science study course shall be allowed to offer the respective subjects (Higher Grade) selected from group F to satisfy the requirements of (iv) above. Provided further that such a person shall, in the case of the technical, the agricultural and the domestic science study course, not offer a subject on the Higher Grade from group E, provided further that in the case of the

technical, the commercial and agricultural study course, mathematics on at least the Standard Grade and, in the case of the domestic study course, mathematics or a natural science on at least Standard Grade shall be passed. However, in the case of the commercial study course, only the subject economics Higher Grade from group E is recognised for the purpose of (iv) above.

Since the above regulations were issued, the Joint Matriculation board has effected certain amendments. These are:

- (i) In order to obtain a Matriculation exemption it is now necessary for a candidate to pass the Second Language on the Higher Grade. Prior to this amendment the Second Language could be passed on the Standard Grade. (100)
- (ii) In 1975 one of the requirements for a Matriculation exemption was that the candidate had to obtain a minimum of 40% in each of at least three subjects on the Higher Grade, one of which had to be the official language. (First language on the Higher Grade) and the remaining two selected from any two from groups B, C, D, E and F (accountancy only). Prior to this date accountancy taken on the Higher Grade was only recognised as one of the three subjects on the Higher Grade for the commercial course of study. Accountancy, under the amended rule, is now recognised as one of the three Higher Grade subjects for a study direction, provided mathematics is taken at least on the Standard Grade and that accountancy remains a group F subject. (101)
- (iii) In 1975 the group requirements were that a candidate had to include among the five subjects passed, a subject from each of four different groups. In 1976 this requirement was altered

to allow candidates to include among the five subjects passed, two subjects from each of four different groups C or E and at least one subject from each of two other groups. (102)

- (iv) The Joint Matriculation Board allowed the following concession in respect of candidates who had failed to obtain the minimum aggregate for Matriculation exemption. "Such candidate shall be exempted from this requirement if he thereafter obtains a teacher's diploma within minimum duration of three years, issued by a South African university or education department, and exemption shall take effect as from the date of the teacher's diploma." (103)

As these amendments were only announced in 1976, their effect on the results of the Senior Certificate Matriculation exemption could only be gauged after the 1977 examination results.

## 2.7 THE NORMALIZING PROCEDURE

In chapter 3 of this study, which deals with the extent and incidence of *failure* in Indian secondary education, it will be noticed that the results of the Indian candidates in the Natal Senior Certificate, show extreme fluctuations, especially when this examination was under the control of the Natal Education Department. For example, in 1953 the Indian pass rate in the Natal Senior Certificate examination was as low as 26% and in 1954 and 1955, the pass rate increased to approximately 34% and thereafter remained more or less constant at the 44% level until 1960. Suddenly in 1961, the pass rate jumped to a record level of 74% and then took a downward plunge to 62% in the following year.



During this period, the results of the White candidates, writing the same examination as the Indian candidates, remained at a constant level of about 80%.

These extreme fluctuations in the results of the Indian candidates, suggest that presumably no statistical adjustments were made to the marks obtained by the Indian candidates. Generally, when statistical adjustments are made to the raw examination scores by the use of percentile or ogive curve, the examination results do not show extreme fluctuations.

According to Malherbe<sup>(104)</sup> some examining bodies did make use of the percentile or ogive curve for statistical adjustments as long ago as 1930. These attempts at adjustments were, however, of a sporadic nature. The next step towards stabilization was to adjust the distribution of the marks obtained by the candidates according to the average distribution of the unadjusted marks obtained during the previous five years in a particular subject. It was realized that this method had the weakness in that the marks scored in a particular abnormal year in the past might distort the standard to be applied in future years in that subject. On the other hand, to stick too closely to adjusted averages would lead to rigidity and preclude future improvement in the standards of evaluation.

Thus in the early 1970s, the Joint Matriculation Board resorted to the 'standard distribution' procedure by using the average of previous years' distribution as a guide in order to determine only the following two points on the cumulative percentile graph paper used for the purpose of plotting the distributions: (a) the point indicating the percentage

of *failures* (i.e. marks below  $33\frac{1}{3}\%$ ) and (b) the point indicating the percentage reaching *distinctions* (i.e. A,s: 80%). These points were joined by a straight line which then represented the 'standard distribution' or norm according to which the adjustments in the distribution of marks obtained in a particular examination had to be made, by adding or subtracting marks according as the graphs of these two distributions deviated from each other. The 'standard distribution' line also determined the standard median percentage mark in that subject.

The 'standard distribution' obviously varied from subject to subject. In some subjects such as mathematics or physics, the marks obtained were usually more widely spread along a scale from 0% to 100% than in such subjects as history and the home languages. In the latter kind of subject, there was less dispersion and the marks tended to cluster more closely around the mean.

Obviously, the degree of differentiation between the candidates varied mainly according to the traditional methods of examining which had developed over the years in those subjects. For example in history, where the essay type of questions prevailed, there was poor differentiation. It was less possible for a brilliant candidate to obtain between 90 and 100% in history than in a subject like mathematics where the type of examination differentiated more effectively between the varying abilities of the candidates.

Malherbe<sup>(105)</sup> presents the adjusted norms approved by the Joint Matriculation Board in respect of the six subjects commonly taken by candidates for Matriculation in the examinations conducted by the various examining authorities. These subjects are: English Higher Grade, Afrikaans Higher Grade, mathematics, history, geography and



science.

The approved norms were to serve as a guide for each of the nine examining bodies in determining the percentage of candidates who should fail and the percentage of candidates who should pass with distinctions in each subject.

In the table below, the adjusted percentage of candidates who should be failed in the various subjects taken for the Matriculation examination in 1974 for each of the examining bodies, are presented.

TABLE 2.11

NORMS FOR THE PERCENTAGE OF CANDIDATES WHO SHOULD FAIL IN THE MATRICULATION SUBJECTS APPROVED BY THE JOINT MATRICULATION BOARD FOR 1974

Examining body	English H.G.	Afrikaans H.G.	Maths.	History	Geog.	Science
Cape	4,0%	2,0%	18,0%	9,0%	8,0%	9,0%
Natal	3,0%	2,0%	20,0%	8,0%	12,0%	12,0%
Transvaal (excludes project)	0,9%	0,9%	20,0%	4,5%	5,0%	5,0%
O.F.S.	2,0- 2,5%	2,0- 2,5%	14,5- 16,5%	12,5- 14,5%	12,5- 14,5%	12,5- 14,5%
J.M.B.	2,0%	-	15,0%	9,0%	10,0%	13,0%
National	14,0%	7,5%	56,0%	-	32,0%	25,0%
Coloureds	6,0%	5,0%	42,0%	26,0%	22,0%	22,0%

Note: In the JMB examinations there were very few candidates taking Afrikaans.

Source: Malherbe, E.G. *Education in South Africa*. Vol.2. p 505



From the approved norms for failure in the various subjects it will be seen that the norms not only differed from subject to subject but also as between the various examining bodies. This was because the standard or norm for each examining body was in terms of its own past practice in evaluating the performance in its own particular candidate population. Though the adoption of a system of norm gives a semblance of validity, there is no way of ensuring its comparability as between the various examining bodies or even between the different subjects.

To arrive at comparable norms for the non-White candidates the Joint Matriculation Board arbitrarily decided to apply to the Bantu candidates the same norms as those of the Department of National Education. To the Indians, the norms of the White Natal Education Department were applied. The Coloureds were given the norms of their own, somewhere in between those of the Bantu and the Indian. (106)

The whole idea of using a particular norm for failing a certain percentage of candidates each year is based on the assumption that there is a greater measure of stability in the results. Reduced to simple terms, this procedure endeavours to maintain that it is better to have a norm in the form of a percentage of candidates who should fail in particular subject than an arbitrary pass or fail mark (currently 33½% or lower). The latter, being dependent upon subjective factors in interpreting the syllabus and in setting and marking the examination papers, is much more likely to vary in a random manner than the former.

From the foregoing, it will be seen that *failure* is built into the examination system. However, the application of the normalizing pro-

cedure in the Senior Certificate examination in recent years in respect of the Indian candidates, has brought about a great all round improvement in the results obtained by the Indians.

#### REFERENCES

1. Naidoo, B.A. : "Indian Education with Special reference to Socio-Economic Aspects." *The Teachers Journal* XVIII No. 2 Nov. 1969 pp.16-17.
2. Suid-Afrikaanse Buro vir Rasse - *Aangeleenthede, 1975 Indiërbevolking van Suid Afrika*, Pretoria p.12.
3. Booyens, J., Alsopp, V.M., Naidoo, P.L., Makan, C.V., Manjoo and Campbell, G.D., : The Nutritional somatometric and Socio-economic status of twenty Chatsworth Indian Households *University of Durban-Westville Journal* 2(1) Nov. 1973 : pp.29-45.
4. Naidoo, B.A. op. cit., p.17.
5. Department of Economics, University of Natal : *A Survey of Indian Housing in Durban*.
6. Department of Economics , University of Natal "The Indian Domestic Budget" *Additional Report No. 6 of Natal Regional Survey - Keartlands Durban* 1969 p.73.
7. Department of Statistics - *Population Census 1970* 8 December 1975 p.4.
8. Naidoo, B.A. op. cit., p.17.
9. Ibid., p.17.
10. Van der Walt, N.: "Nursery School Education, Department of Indian Affairs" in *Early Childhood Education: The Nursery School Association of South Africa*. p.22.
11. Lotter, J.M.: *Socio-Ekonomiese Opname van Indiërs in Natal. Deel 4 : Opvoedkundige Peil en Skool Bywoning - Human Sciences Research Council Pretoria* 1975.
12. Osman, E.: "Education and the Indian Girl" *Fiat Lux* Vol. 10, No. 3 April 1975 p.6.
13. Naidoo, B.A. op. cit., p.17.
14. Ibid., p.19.
15. Natal Indian Teachers' Society : *"Silver Jubilee" 1925-1950* p.15.

16. Behr, A.L. and MacMillan, R.G.: *Education in South Africa*, Van Schaik Pretoria, 1971 p.421.
17. Ibid., p.421.
18. Natal Indian Teachers' Society, op. cit., p.16.
19. Naidoo, K.P.: "Secondary Education for Indians in Natal" *Teachers' Journal* - Organ of the South African Indian Teachers' Association Vol. XVI May 1967 No. 1 p.12.
20. Ibid., p.12.
21. Ibid., p.12.
22. Ibid., p.18.
23. Behr, A.L. and MacMillan, R.G., op. cit., p.425.
24. Behr, A.L.: "Historical Perspectives to Indian Education" *Fiat Lux* Vol. 5 No. 9 November 1970, p.10.
25. Ibid., p.10.
26. Nel, P.R.T.: *Report on Education for Indians in South Africa*. Unpublished Report to the Minister of Indian Affairs, Annexure B. June 1964 p.70.
27. Province of Natal *Report of the Provincial Education Committee (The Wilks Report) 1946*, p.60.
28. Ibid., p.60.
29. Malherbe, E.G.: *Education in South Africa* Vol.II 1923-1975. Juta and Co. Ltd. Cape, 1977 p.243.
30. Ibid., pp.243-244.
31. Ibid., p.244.
32. Ibid., p.244.
33. Ibid., p.245.
34. Ibid., p.245.
35. Ibid., p.245.
36. Province of Natal: op. cit., p.135.
37. Behr, A.L. and MacMillan, R.G., op. cit., pp.152-153.
38. Ibid., p.153.
39. Ibid., p.153.



40. Ibid., p.171.
41. Ibid., p.425.
42. Department of Indian Affairs - Division of Education File No.  
20/6/2
43. Behr, A.L. op. cit., p.10.
44. Wall, W.D., Schonell, F.J. et al.,: *Failure in School - an International Study* UNESCO Institute for Education, Hamburg, 1972 p.3.
45. Ibid., p.2.
46. Ibid., p.3.
47. Ibid., p.3.
48. Ibid., p.3.
49. Ibid., p.17.
50. Jenkins, A.J. cited by G.W. Miller - *Success, Failure and Wastage in Higher Education* The University of London Institute of Education - George Harrop, London 1970 p.18.
51. Van Vliet cited by Wall et al. op. cit., p.18.
52. Wall, W.D. et al. op. cit., pp.17-18.
53. Van der Walt, N.: *Failure at School - Part 1" Fiat Lux* Vol. 7, No. 9. Nov. 1972 pp.18-19.
54. Silberman, C.: *Crisis in the Classroom - The Remaking of a Nation*, Vintage Books , New York 1970.p.347.
55. Niven, J.: "Assessment of What and for What in the Primary School *The Transvaal Educational News* Vol. LXXIV No. 8 Aug. 1977. pp.15-17.
56. Dobie, B.A.: cited by Niven, J. op. cit., pp.12-14.
57. Natal Education Department: *Schools Hand book Directions for the Conduct and Control of Government European and Government and Government Aided Indian Schools -* pp.159-175.
58. Behr. A.L. and Macmillan op. cit., p.171.
59. Ibid., p.186.
60. Province of Natal op. cit., p.221.

61. Malherbe, E.G., op. cit., p.429.
62. Ibid., pp.429-30.
63. Ibid., p.437.
64. Ibid., p.442.
65. Ibid., p.442.
66. Ibid., p.431
67. Ibid., p.431.
68. Ibid., p.443.
69. Ibid., p.444.
70. Ibid., p.446.
71. Ibid., p.448.
72. Beeby, C. cited by Malherbe, op. cit., p.420.
73. Natal Education Department - Correspondence File 39/1/10 dated 3 October 1977.
74. Natal Education Department - *Senior Certificate Examination Handbook 1966*. pp.4-13.
75. Lazarus, A.N. cited by P.R.T. Nel - *Report on Education for Indians in South Africa*, unpublished report to the Minister of Indian Affairs Annexure B, 29 June 1964. p.11.
76. Nel, P.R.T., op. cit., p.13.
77. Ibid., p.28.
78. Department of Indian Affairs - (Division of Education) Circular I.E. No. 27 of 1967 File No. 19/30/1
79. Department of Indian Affairs - (Division of Education) Report for the year 1968. p.47.
80. Department of Indian Affairs - (Division of Education) Circular I.E. No. 22 of 1968 File No. 19/15/6/2.
81. Malherbe, E.G., op. cit., p.351.
82. Naguran, C.A.: "Differentiated Education well on its way." *Fiat Lux* Vol. 10 No. 6 June/July 1975 p.19.
83. Lloyd, W.B.: External Examination - A brief History - *Fiat Lux* Vol. 10, No. 1 Feb. 1975 pp.6-7.
84. Department of Indian Affairs - (Division of Education) Circular Minute BD of 1972 File No. 19/30/1.



85. Department of Indian Affairs - (Division of Education) Circular  
No. 28 of 1972 File 19/15/6/2.
86. Jooste, J.H.: "Assessment in Differentiated Education" Lecture  
delivered at the National Conference on Evaluation in  
Education. July 2-5 1974 p.16.
87. Department of Indian Affairs - (Division of Education) Circular  
Minute I.E. No. BD of 1972 - File No. 19/30/1.
88. Department of Indian Affairs - (Division of Education) Circular  
Minute BB of 1975 File No. 19/20/6/1.
89. Department of Indian Affairs - (Division of Education) Circular  
Minute AW of 1973 File No. 19/30/1.
90. Ibid.
91. Department of Indian Affairs - (Division of Education) Circular  
No. I.E. 27 of 1975 File No. 9/34/1/16.
92. File No. 19/20/2.
93. Department of Indian Affairs - (Division of Education) File No.  
19/20/2.
94. Department of Indian Affairs - (Division of Education) File No.  
19/20/2.
95. Department of Indian Affairs - (Division of Education) Circular  
No. I.E. 27 of 1975 File No. 9/34/1/16.
96. Ibid.
97. Department of Indian Affairs - (Division of Education) Circular  
No. I.E. 4 of 1977 File No. 9/34/1/16.
98. Malherbe, E.G., op. cit., p.526.
99. Department of Indian Affairs - (Division of Education) Circular  
No. I.E. 27 of 1975 File No. 9/34/1/16.
100. Department of Indian Affairs - (Division of Education) Circular  
No. I.E. 25 of 1977 Schedule B File No. 9/34/1/16.
101. Department of Indian Affairs - (Division of Education) Circular  
No. I.E. 32 of 1976 File No. 19/20/10/3.
102. Department of Indian Affairs - (Division of Education) Circular  
No. I.E. 25 of 1977 File No. 9/34/1/16 Schedule B.
103. The Joint Matriculation Board: Matriculation Examination Hand  
book, 1977 Pretoria Part 1 p.56.
104. Malherbe, E.G., op. cit., p.503.
105. Ibid., p.505.
106. Ibid., p.509.



## CHAPTER THREE

## 3. THE INCIDENCE AND EXTENT OF FAILURE IN INDIAN SECONDARY EDUCATION WITH SPECIAL REFERENCE TO NATAL

3.1 INTRODUCTION

In this chapter the incidence and extent of *failure* in Indian secondary education, flowing from the issues raised in the previous chapter will be presented and discussed in the following order;

- (i) data on *failure* as reflected in the schools' examinations promotion and retardation schedules.
- (ii) data on *failure* as reflected in the published results of the external examination conducted by an outside authority, in this case the Natal Education Department and the Department of Indian Affairs.

3.2 FAILURE AS REFLECTED IN THE SCHOOLS' INTERNAL EXAMINATION SCHEDULES

In respect of the internal examinations, only data extracted from the records of the Department of Indian Affairs will be considered.

As discussed in the previous chapter, the external Standard VI examination was gradually phased out first, by the introduction of a system of controlled examination in 1968, where the Department of Indian Affairs set the examination papers and provided the marking memoranda for the schools to mark their own examination scripts. In 1970 the number of controlled examination papers was reduced to three. In 1972 the Standard VI examination became a wholly internal examination.

The Junior Certificate examination continued to be an external examination after the transfer of Indian education to the Department of Indian Affairs. However, from 1972 this examination became an internal examination

In the discussion of the incidence of *failure* in the internal examination, the results of the Standard VI examination since 1968 will be

considered. In respect of the Standard VIII examination, the results after which this examination became an internal examination in 1972, will be considered in this section.

### 3.2.1 Results of the Standard VI Examination

#### (i) Under the System of Streaming

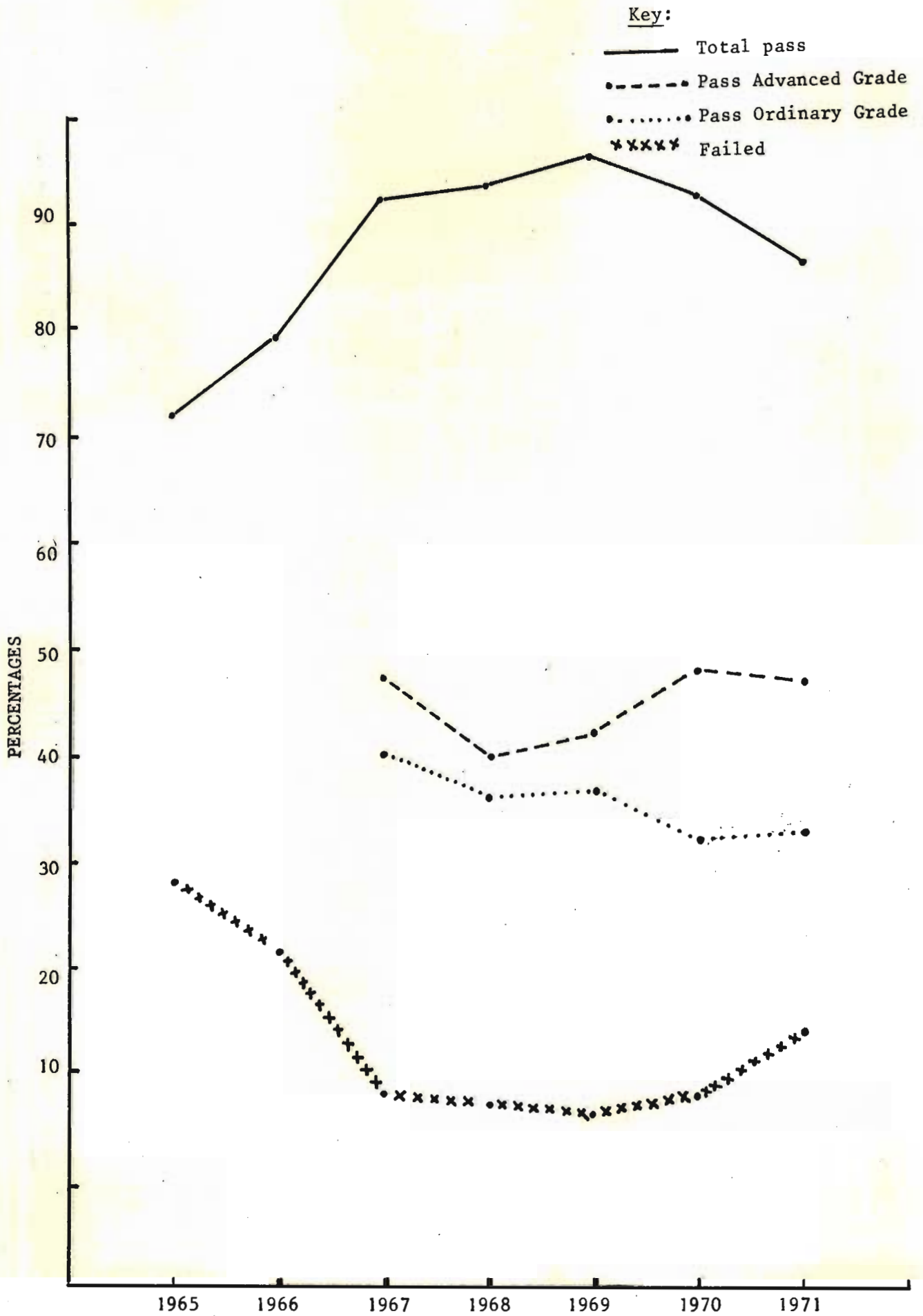
The results of the Standard VI examinations are graphically illustrated in Figure 3.1. From 1968 to 1971, the Standard VI examination was a controlled examination, in which the Department of Indian Affairs set the examination papers in a few selected subjects and provided the schools with the marking memoranda. School personnel marked the examination scripts. During this period the Standard VI examination results improved considerably, reaching the above 90% level.

The possible reason for the general improvement in the Standard VI results could be the introduction of streaming in Indian schools. Prior to streaming, a Standard VI candidate could either pass with a continuation certificate or pass with a school leaving certificate. With the introduction of streaming, a Standard VI candidate could pass either on the Advanced Grade or the Ordinary Grade or obtain a school leaving certificate.

Moreover, most of the Standard VI candidates were from the primary school stage. Teachers in the Standard VI classes in the primary schools were presumably highly motivated to achieve good Standard VI examination results. In the overall assessment of a teacher applying for promotion in a primary school, the

FIGURE 3.1

Standard VI Results: 1965-1971





Standard VI examination successes attained by his pupils were probably taken into account.

(ii) Under the New System of Differentiated Education

In 1973 the Department of Indian Affairs introduced the new system of differentiated education. The Standard VI examination was wholly an internal examination under this educational programme.

The Standard VI examination results for 1973 to 1975 are presented in Table 3.1.

TABLE 3.1

THE RESULTS OF THE ACADEMIC COURSE STANDARD VI INTERNAL EXAMINATION UNDER THE NEW SYSTEM OF DIFFERENTIATED EDUCATION IN ALL INDIAN SCHOOLS IN THE REPUBLIC : 1973-1975

Year	NUMBER WHO WROTE	PASSED				FAILED	
		ACADEMIC GRADE	%	PRACTICAL GRADE	%	NUMBER	%
1973	11 131	8 903	79,98	1 927	17,31	301	2,71
1974	7 883	6 125	77,69	1 448	18,37	310	3,94
1975	8 380	6 589	78,62	1 527	18,25	262	3,12
Totals	27 394	21 617		4 902		873	
Average	9 131	7 205	78,76	1 634	17,97	291	3,26

(Source : Promotion and Retardation Schedules - Division of Education - Department of Indian Affairs)

The results presented in Table 3.1 are in respect of the Academic Course pupils only. This means that all the pupils in the Academic Course Standard VI in 1973 to 1975 as presented here, are already a selected group by virtue of having passed a qualifying examination in Standard V. Those pupils who did not satisfy the requirements for the Academic Course were either promoted into the Practical Course Standard VI if they satisfied the minimum requirements, or failed.

In 1973 there were 11 131 pupils who wrote the Standard VI Academic Course examination. Of this number 8 903 pupils, or 79,98% passed into the Standard VII Academic Course and 1 927 or 17,31% passed into the Standard VII Practical Course and 301 pupils failed. In 1974 the number who wrote the Standard VI Academic Course was 7 883 pupils representing a drop of 3 248 pupils or 29,17% in one year. This drop in the number of pupils who wrote the Academic Course Standard VI in 1973 could possibly be attributed to the fact that prior to the introduction of the new differentiated education system in 1973, pupils in Standard V were either promoted or failed. There was no Practical Course.

The results in Table 3.1 show that there was more or less a consistent percentage of pupils passing on the Academic grade. The average percentage of passes into the Academic Course Standard VII is 78,76%. However, an average of 17,97% of the Academic Course pupils failed to pass into the Academic Course Standard VII but only managed to pass into the Practical Course Standard VII over the three years and an average of 3,26% of this Academic Course Standard VI pupils failed.



It must be remembered that all the pupils in the Academic Course Standard VI in the three years under discussion were already a selected group and yet approximately 4 902 out of 27 394 or 17,97% of the Academic Course pupils were placed in the Practical Course.

A pertinent question here is whether the Standard V examination is a valid predictor for purposes of classifying pupils into the Academic and Practical Courses. According to the Department of Indian Affairs only about 20% of the pupils should fall into the Practical Course<sup>(1)</sup>. To get a clearer picture of the situation, Table 3.2 shows the total number of the pupils both in the Academic Course and the Practical Course and their results for the years 1973 to 1975.

TABLE 3.2

RESULTS OF THE COMBINED ACADEMIC AND PRACTICAL COURSE STANDARD VI EXAMINATION UNDER THE NEW SYSTEM OF DIFFERENTIATED EDUCATION IN ALL INDIAN SCHOOLS IN THE REPUBLIC : 1973-1975

YEAR	NUMBER WHO WROTE	PASSED				FAILED	
		ACADEMIC GRADE	%	PRACTICAL GRADE	%	NUMBER	%
1973	15 646	9 096	58,1	5 602	35,8	948	6,1
1974	11 834	6 207	52,5	4 731	39,9	896	7,6
1975	12 237	6 822	55,7	4 784	39,1	631	5,2
Total	39 717	22 125		15 117		2 475	
Average	13 239	7 375	55,43	5 039	38,26	825	6,3

Source: Promotion and Retardation Schedules - Division of Education, Department of Indian Affairs



The data presented in Table 3.2 are in respect of all the Standard VI pupils who wrote either the Academic Course Standard VI examination or the Practical Course Standard VI examination during the years 1973 to 1975. According to Table 3.2 approximately 38,26% of the total Standard VI pupils in the three years under discussion were promoted into Standard VII Practical Course. In 1974 and 1975 the percentage of promotion into the Practical Course Standard VII is approximately 40%. This is twice the expected distribution of the Practical Course pupils, who, according to the calculation of the Department of Indian Affairs, should be in the region of 20%. The percentage of *failures* was an average of 6,3 for the three years.

### 3.2.2 Results of the Standard VII Examination

#### (i) Under the System of Streaming

From an analysis of the *failure* rate in the Standard VII examination, presented in the table below, it will be seen that the average *failure* rate in the Advanced Grade was about 18% per year. The average *failure* rate in the Ordinary Grade appears to be quite high at 34,7%.

TABLE 3.3

FAILURE RATE IN THE STANDARD VII EXAMINATION: 1967-1972

Year	Advanced Grade	Ordinary Grade
1967	18,8%	44,7%
1968	20,0%	32,0%
1969	19,2%	31,6%
1970	20,5%	33,4%
1971	15,9%	34,9%
1972	16,0%	32,0%
Average % per year	18,42%	34,7%

The results of both the Advanced and Ordinary Grades are graphically represented in Figure 3.2.

While the results in the Advanced grade examination appear to be improving progressively, there is a high *failure* rate in the Ordinary Grade.

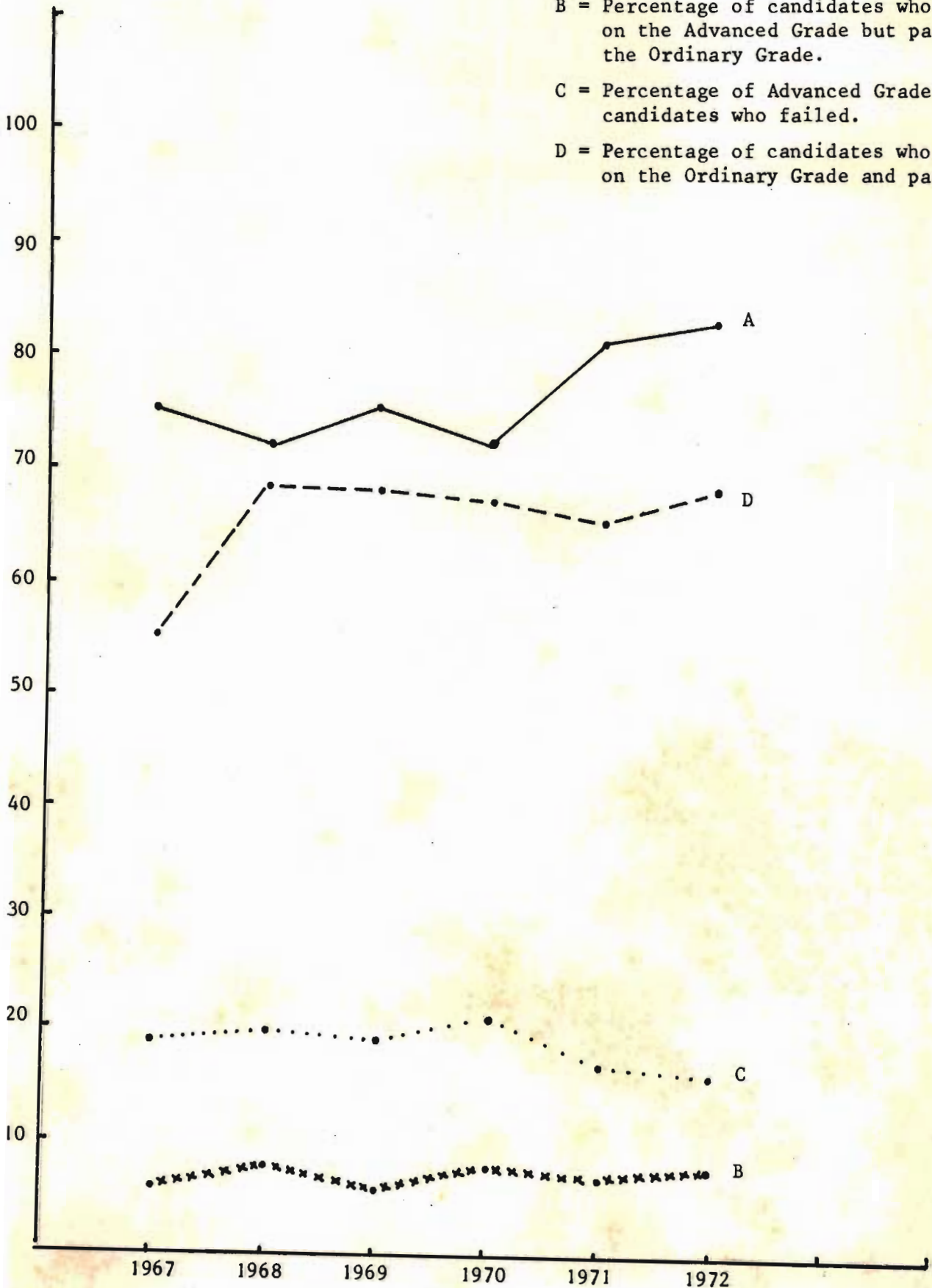
The high *failure* rate in the Ordinary Grade examination suggests that this grade was beyond the ability range of many pupils. According to Behr and MacMillan<sup>(2)</sup>, below average pupils could not be termed "Ordinary". In fact the Lighton Committee<sup>(3)</sup> suggested that there should be three streams, A, B, and C, for the above-average, the average and the below average groups. Another factor that could have contributed to the high *failure* rate in the Ordinary Grade in Indian schools was the fact that the curriculum was still too academic in nature. The subjects offered in the Advanced and Ordinary Grades were the same, except that they were offered at two different levels. Moreover, in Indian secondary schools the majority of the Indian candidates took Latin as the second language. The syllabus for Latin was a common syllabus for both the grades. Mathematics was also taken by the majority of Indian candidates. It is common knowledge that the *failure* rate in these subjects is quite high.

The high *failure* rate in the Ordinary Grade examination appears to be inconsistent with the principles of streaming, where each pupil was supposed to be given the opportunity of pursuing a course of study in accordance with his ability. It was this aspect that later received attention when the new system of differentiated education was introduced in 1973.

Percentages of pass and failure in the Standard VII Examination: 1967-1972

Key:

- A = Percentage of pass on the Advanced Grade
- B = Percentage of candidates who wrote on the Advanced Grade but passed on the Ordinary Grade.
- C = Percentage of Advanced Grade candidates who failed.
- D = Percentage of candidates who wrote on the Ordinary Grade and passed.





(ii) Under the New System of Differentiated Education

Under the new system of differentiated education, Standard VII marks the end of the Junior Secondary phase. The Standard VII Academic Course examination is a crucial examination. On the performance at this examination, a pupil may either be allowed to follow a chosen field of study in the Senior Secondary phase, leading to the Senior Certificate with or without Matriculation exemption, or be placed in the Practical Course, which at present goes up to the Standard VIII level. A pupil who is promoted into the Practical Course, may repeat the standard in order to pursue his study in the normal Academic Course. (4)

The results of the Standard VII interval examination are presented in Table 3.4.

TABLE 3.4

RESULTS OF THE ACADEMIC COURSE STANDARDS VII INTERNAL EXAMINATION UNDER THE NEW SYSTEM OF DIFFERENTIATED EDUCATION IN ALL INDIAN SCHOOLS IN THE REPUBLIC : 1973-1975

YEAR NUMBER WHO WROTE	PASSED				FAILED	
	ACADEMIC	%	PRACTICAL	%	NUMBER	%
1973 8 727	5 820	66,70	2 332	26,72	575	6,58
1974 8 879	5 802	65,34	2 453	28,64	624	7,02
1975 6 140	4 160	67,75	1 667	27,15	313	5,10
Totals 23 746	15 782		6 452		1 512	
Average 7 915	5 260	66,59	2 150	27,50	504	6,23

(Source: Promotion and Retardation Schedules of Division of Education - Department of Indian Affairs File 19/20/6/2)

When the pupils have reached the Standard VII Academic Course, they have come to the end of the Junior Secondary Course for the ordinary normal pupils. Now it must be remembered that these pupils have already gone through the sifting process twice - first, they were sifted and classified in the final Standard V examination; second, they went through the same process at the end of Standard VI year. Now, at the end of the Standard VII year a further sifting has taken place to classify the pupils.

With reference to Table 3.4, it will be observed that during the years 1973 to 1975, an average of only 66,59% of the already selected pupils in Standard VII Academic Course, actually passed their grade examination, while a fairly high percentage - an average of 27,50% failed to pass their grade and were transferred to the Practical Course Standard VIII. Some of the latter type of pupils perhaps decided to repeat the Standard VII Academic Course rather than follow the Standard VIII Practical Course.

In Table 3.5 the examination results of the entire Standard VII pupil population - both the Academic and Practical Course - are presented.

The data in Table 3.5 show that there were more pupils promoted into the Practical Course than into the Academic Course during the years 1973 to 1975. During these three years an average of 44,4% of the entire Standard VII school population in Indian schools passed into the Practical Course against an average of 42,7% who obtained an Academic Course pass. The average *failure* rate for Standard VII was 12,8%. The *failure* rate appears to be consistent during the three years, except in 1975 where there is a drop of approximately 1%.



During the three years, there appears to be a progressive drop in the rate of passes into the Academic Course and a corresponding increase in the rate of passes into the Practical Course.

TABLE 3.5

RESULTS OF THE STANDARD VII EXAMINATION UNDER THE NEW SYSTEM OF DIFFERENTIATED EDUCATION, ACADEMIC AND PRACTICAL COURSE COMBINED FOR ALL INDIAN SCHOOLS IN THE REPUBLIC : 1973 - 1975

YEAR	NUMBER WHO WROTE	PASSED				FAILED	
		ACADEMIC	%	PRACTICAL	%	NUMBER	%
1973	12 765	5 838	45,7	5 254	41,2	1 673	13,1
1974	13 641	5 812	42,6	6 004	44,0	1 825	13,4
1975	11 102	4 443	40,0	5 335	48,0	1 324	12,0
Totals	37 508	16 093		16 593		4 822	
Average	12 502	5 364	42,7	5 531	44,4	1 607	12,8

(Source : Promotion and Retardation Schedules - Division of Education - Department of Indian Affairs)

To compare the trend in the examination results between the Standard VI Academic Course and the Standard VII Academic Course let us look at Table 3.6.

The information in the Table below shows the percentage of pupils in the Academic Course who either passed into the Academic Course or into the Practical Course. The purpose of this table is to illustrate two points: firstly to show that the process of sifting still goes on after the pupils had been classified into the Academic and



Practical course at the end of Standard V; secondly to show that the practice of promoting a comparatively high percentage of Standard VII pupils into the Practical Course, immediately before the Senior Secondary phase, appears to be prevalent in the schools.

TABLE 3.6

TABLE SHOWING THE COMPARATIVE PASS AND FAILURE RATES OF PUPILS IN THE ACADEMIC COURSE IN STANDARDS VI AND VII

YEAR	PASSED				FAILED	
	ACADEMIC		PRACTICAL		STD VI	STD VII
	STD VI	STD VII	STD VI	STD VII		
1973	79,98%	66,70%	17,31%	26,72%	2,71%	6,58%
1974	77,69%	65,34%	18,37%	28,64%	3,94%	7,02%
1975	78,62%	67,75%	18,25%	27,15%	3,13%	5,10%
Average	78,76%	66,59%	17,97%	27,50%	3,26%	6,23%

(Source : Department of Indian Affairs, Division of Education - File 19/20/6/2.

In Standard VI an average of 78,7% of the pupils pass into the Academic Course against an average of 66,5% in Standard VII. Of the Academic Course pupils passing into the Practical Course, there appears to be a higher percentage in Standard VII than in Standard VI. For example in Standard VI the average percentage of pupils passing into the Practical Course is 17,9% against 27,5% in Standard VII. This suggests that the schools are adopting a more stringent method of sifting at the end of the Standard VII year.

According to the norms of the Department of Indian Affairs, there should be approximately 20% of the pupils in the Practical Course.<sup>(5)</sup> The Practical Course is designed for the dull normal pupils and according to Behr<sup>(6)</sup> the IQ range of the dull normal or what he terms as the dull-average is between 80 to 89 on the NSAGT. The normal distribution of the dull-average is about 16%. If we were to accept the incidence of dull-normal pupils to be in the region of 16%, then the high percentage of 44,4% of the pupils passing into the Practical Course in Standard VII suggests that either the incidence of dull-normal pupils in the Indian community is very much higher than in other groups, or there is something wrong in our examination system, or that the pupils are underachieving?

In a preliminary survey carried out by the Department of Indian Affairs on the question of above-average pupils in the Practical Course, it was found, for example that of the 750 pupils included in the survey, 124 pupils had an IQ, based on the Group Test for Indian South Africans, of between 96 and 115. The details are presented in the table below.

TABLE 3.7

DISTRIBUTION OF SAMPLE PUPILS WITH IQ SCORES (BASED ON THE GTISA OF BETWEEN 96 AND 115+ WHO AT THE END OF STANDARD V PASSED INTO THE PRACTICAL COURSE IN 1975

I.Q. Scores	96-99	100-103	104-107	108-111	112-115+
No. of Pupils	40	37	21	10	16
Percent	32,25	29,83	16,93	8,06	12,90

According to the findings, about 32,25% of the pupils with an IQ score of between 96 to 99 were placed in the Practical Course. More than two-thirds of the sample pupils who could be classified as above average ability were promoted into the Practical Course. The presence of pupils of average and above average ability in the Practical Course suggests that there is an urgent need for remedial measures in the schools.

### 3.2.3 Results of the Standard VIII Examination:

#### Under the New System of Differentiated Education

At the end of 1973 the Indian pupils wrote their examinations under the promotion requirements for the new system of differentiated education. In Table 3.8 the results of the internal Standard VIII Academic Course examination are set out.

TABLE 3.8

RESULTS OF THE ACADEMIC STANDARD VIII INTERNAL EXAMINATION  
IN ALL INDIAN SCHOOLS IN THE REPUBLIC : 1973-1975

YEAR	NO. WHO WROTE	PASSED				SCHOOL LEAVING		FAILED	
		ACADEMIC	%	PRACITCAL	%	NO.	%	NO.	%
1973	8 680	6 940	79,95	34	0,40	890	10,25	816	9,40
1974	6 317	5 298	83,87	-	-	-	-	1019	16,13
1975	7 284	6 134	84,21	-	-	-	-	1150	15,79
Total	22 281	18 372		34		890		2985	
Average %			82,5						13,8

(Source: Division of Education - Department of Indian Affairs  
Promotion and Retardation Schedules)



The results set out in Table 3.8 show that the pass rate in the Standard VIII Course has been improving progressively from 1973 to 1975 with an average pass rate of 82,5% for the three years. It would seem that the process of sifting in the previous standards has helped to attain a good pass rate in the Standard VIII examination. Apart from the process of sifting, the other important factor in the improved pass rate could also be due to the fact that in Standard VIII, the pupils have now embarked on a field of study to suit their individual interests and ability.

#### 3.2.4 Results of the Internal Standard IX Examination

##### (i) Under the Old System of Streaming

The Standard IX examination is a crucial examination and according to Van der Walt<sup>(8)</sup> sifting takes place with an eye on the Standard X examinations. Sometimes, the imminence of an external examination is heralded by a higher failure rate in the preceding year.<sup>(9)</sup> Van der Walt compared a group of Indian high schools with the best Standard X examination results with schools with the worst Standard IX examination results to illustrate how schools manipulate promotion rates. He found that schools with a high failure rate in the Standard IX examination, usually obtain better results in the Standard X examination and schools with the worst Standard X examination results usually have a low failure rate in Standard IX.

This practice of manipulating the pass rates in the year preceding an important external examination like the Senior Certificate or "Matric" examination is, perhaps, due to the great importance that is attached to the examination. The results of the schools' Senior Certificate examination are given much publicity and receive much attention as was shown in the opening chapter in this study. Standard

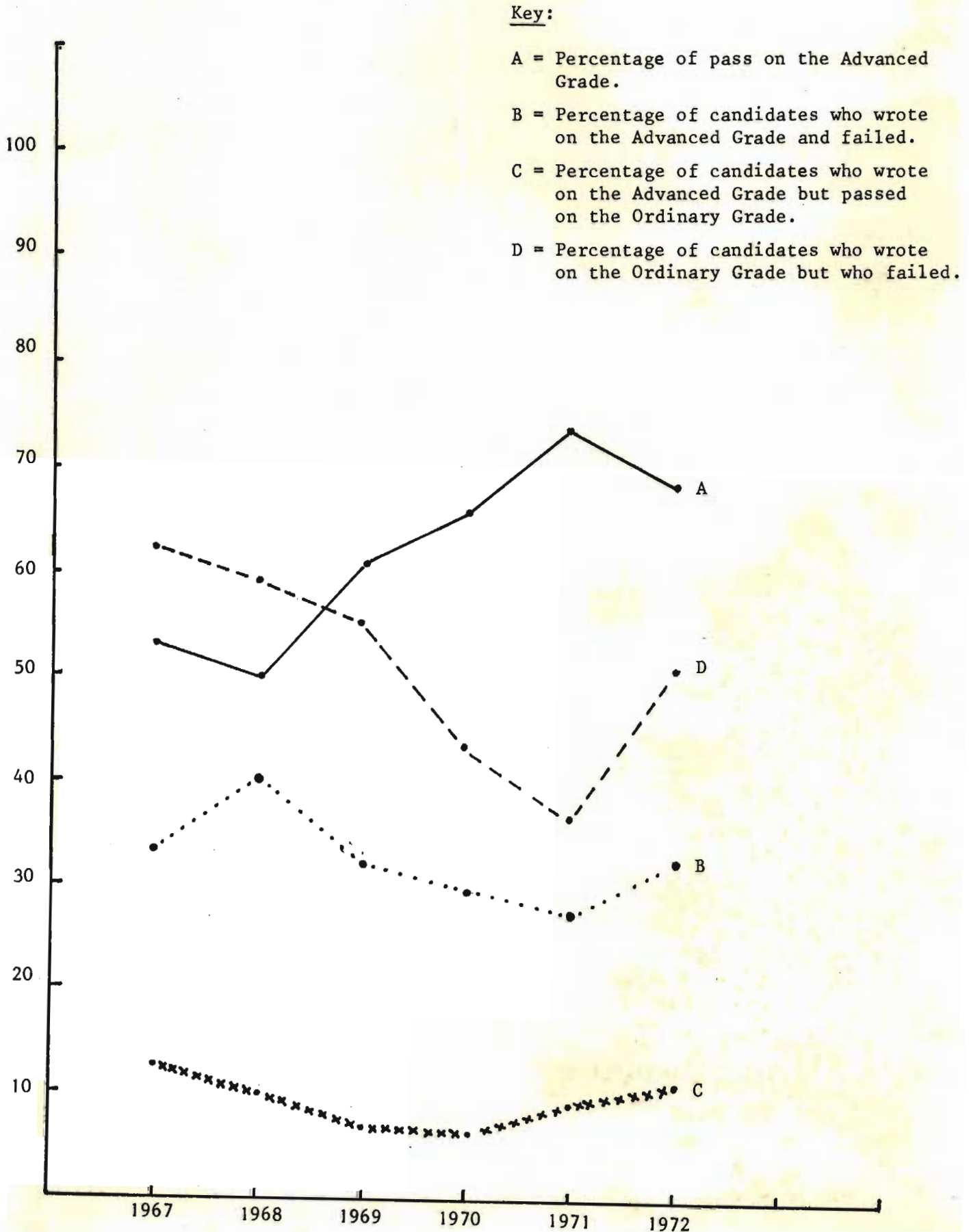
IX examination results do not come into public gaze but the Senior Certificate or "Matric" results do. So, some school principals, to maintain a good examination record, retard a fairly high percentage of their Standard IX pupils.

In Figure 3.3 the results of the internal Standard IX examination are presented.

From Figure 3.3 it will be seen that the failure rate in the Advanced Grade examination for the period 1967 to 1972, has been dropping steadily. At the same time the percentage of pupils who wrote on the Advanced Grade but who obtained a pass on the Ordinary Grade also dropped from about 13% in 1967 to about 6% in 1970 but rose slightly in the remaining years.

The percentage of failure in the Ordinary Grade examination for the years 1967 to 1970 appears to be quite high in comparison with the percentage of failures in the Advanced Grade. In 1967 - the first year of streaming in Indian schools - 167 pupils wrote the examination on the Ordinary Grade. Of these only 63 pupils passed and 104 pupils (or about 62% failed the Ordinary Grade examination. The rate of passes for the years 1968 to 1970, does not show much improvement. During these years an average of 52% of the Ordinary Grade pupils failed. In an investigation carried out by the Transvaal Education Department<sup>(10)</sup> in 1965 on failure in Standard IX, it was found that the percentage of failures in the school leaving course was twice that of the university entrance course. In the university entrance course, about 15% of the Standard IX pupils in their investigation failed, while 30,8% pupils failed in the school leaving course.

Results of the Internal Standard IX Examination: 1967-1972





(ii) Under the New System of Differentiated Education

The results of the internal Standard IX examination under the system of differentiated education are set out below.

TABLE 3.9

RESULTS OF THE ACADEMIC COURSE STANDARD IX EXAMINATION UNDER THE SYSTEM OF DIFFERENTIATED EDUCATION IN ALL INDIAN SCHOOLS IN THE REPUBLIC: 1973 - 1975

YEAR	NO. WROTE	NO. PASSED	%	NO. FAILED	%
1973	5 106	3 754	73,6	1 352	26,4
1974	6 102	4 393	71,9	1 709	28,1
1975	5 076	3 850	75,8	1 226	24,2
Average %			73,7		26,3

(Source : Department of Indian Affairs - Division of Education, Promotion & Retardation Schedules.)

The Standard IX results seemed to have reached some stability as compared with the fluctuating results under the old system of streaming (see Figure 3.3).

However, if the Standard VIII examination results under the new system of differentiated education (see Table 3.8) are compared with the results of the Standard IX examination as set out in Table 3.9, it will be noticed that the failure rate in Standard IX is twice that of the Standard VIII examination. Does this higher failure rate in Standard IX suggest that with the imminence of the Senior Certificate examination in the following year, schools are adopting a policy of sifting?

### 3.3 FAILURE AS REFLECTED IN THE EXTERNAL EXAMINATIONS

In respect of the external examinations, data obtained from the Natal Education Department and the Department of Indian Affairs will be presented.

The results of the following external examinations will be considered:

(i) The Standard VI Examination (Natal)

Under Natal Education Department this was an external examination until transfer of Indian education to the Department of Indian Affairs in 1966. Therefore the results of the Standard VI examination will be presented up to 1966.

(ii) The Standard VIII (Junior Certificate) Examination

The results of the Standard VIII examination which was under the control of the Natal Education Department up to 1965 will be presented first and then the results of the examinations under the control of the Department of Indian Affairs will follow.

(iii) The Senior Certificate Examination

The results of the Natal Senior Certificate examination which was under the control of the Natal Education Department from 1953 to 1971 will first be analysed and then the Senior Certificate examination results of the Department of Indian Affairs will be presented and discussed.

### 3.3.1 The Standard VI Examination results under Natal Education

#### Department

The Standard VI examination results were classified into two types of passes, namely, the Continuation Certificate pass and the School Leaving Certificate pass. The Continuation Certificate entitled a pupil to continue his formal education up to and including the Standard X level, while the School Leaving Certificate was issued to a pupil who had passed the Standard VI examination but which did not entitle him to continue beyond Standard VI. For such a pupil Standard VI marked the end of his formal schooling. Such a pupil could, however, repeat Standard VI in order to pass the Standard VI examination with a Continuation Certificate.

Coloured and Indian pupils wrote a common Standard VI examination. In Table 3.10 the results of the Standard VI examination for the Coloured and Indian pupils for the five years 1958 to 1962 are presented.

TABLE 3.10

RESULTS OF THE NATAL STANDARD VI EXAMINATION FOR COLOURED AND INDIAN PUPILS FOR THE YEARS 1958 TO 1962

	COLOURED PUPILS					INDIAN PUPILS				
	1958	1959	1960	1961	1962	1958	1959	1960	1961	1962
No. entered	684	740	873	1038	1217	5215	5599	6072	7191	7572
Pass: Con- tinuation	388	389	341	401	653	3689	3781	3285	4297	4993
Pass: Leav- ing	121	111	170	207	169	508	472	909	1122	889
No. Failed	175	240	362	430	395	1018	1346	1878	1772	1690
Percentage Failures	25,6	32,4	41,5	41,4	32,5	19,5	24,1	34,9	24,6	22,5

(Source : Reports of the Director of Education - Province of Natal: 1958 to 1962)

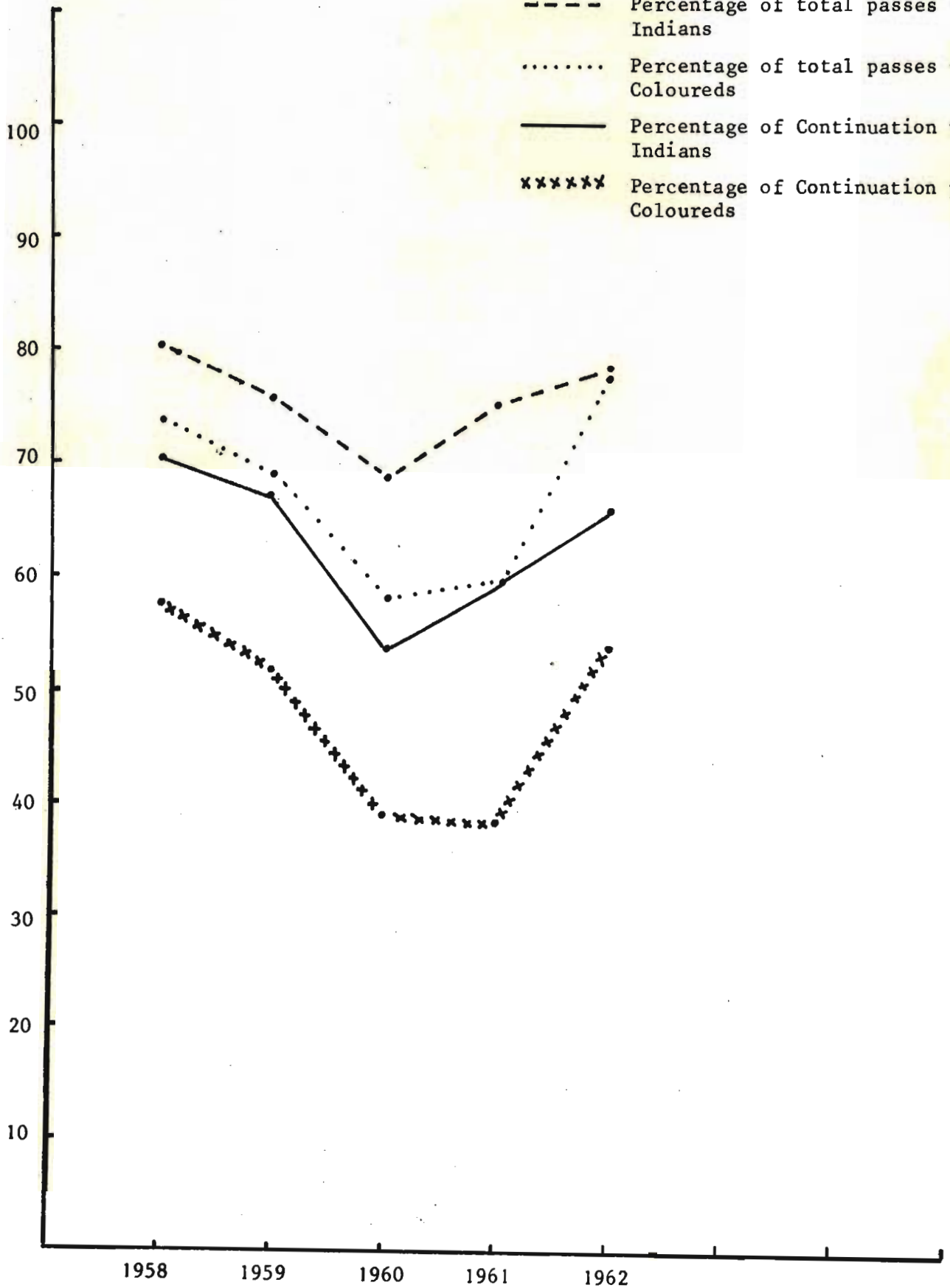


FIGURE 3.4

Results of the External Standard VI Examination: 1958-1962

Key:

- Percentage of total passes - Indians
- ..... Percentage of total passes - Coloureds
- Percentage of Continuation passes - Indians
- \*\*\*\*\* Percentage of Continuation passes - Coloureds



From Table 3.10 the following are noted:

the *failure* rate of the Indian pupils was on the average, much lower than that of the Coloured pupils. The average *failure* rate for the Indian pupils was 26,2% and for the Coloured pupils it was 34,7%.

The average percentage of Indian pupils who passed with a Continuation Certificate was 63% against 48% for Coloureds.

### 3.3.2 The Standard VIII (Junior Certificate) Examination Results

#### (i) Under the Natal Education Department.

The results of the Natal Junior Certificate examination for the period 1953 to 1962 are presented graphically in Figure 3.5. It must be pointed out that during this period there was neither streaming nor differentiation in the educational programme. The Indian secondary school curriculum was restricted to only a few subjects.

In Figure 3.5 it will be observed that the pass rate for the Indian candidates fluctuated between 50% and 60%. The results of the Coloured candidates show greater fluctuations than that of the Whites and Indians. Only in 1960 did the results of the White candidates drop close to that of the Indian candidates at 62%.

The poor results of the Indian candidates in the Natal Junior Certificate examination under the Natal Education Department could possibly be due to the narrow and restricted curriculum offered to the candidates. For example between 1962 and 1965 only the following subjects were offered to the Indian Junior Certificate candidates: English, Latin, Afrikaans, history, geography, arithmetic, mathematics, house-craft, biology, physical science and bookkeeping.

FIGURE 3.5

Results of the Natal Junior Certificate Examination:  
1953-1961

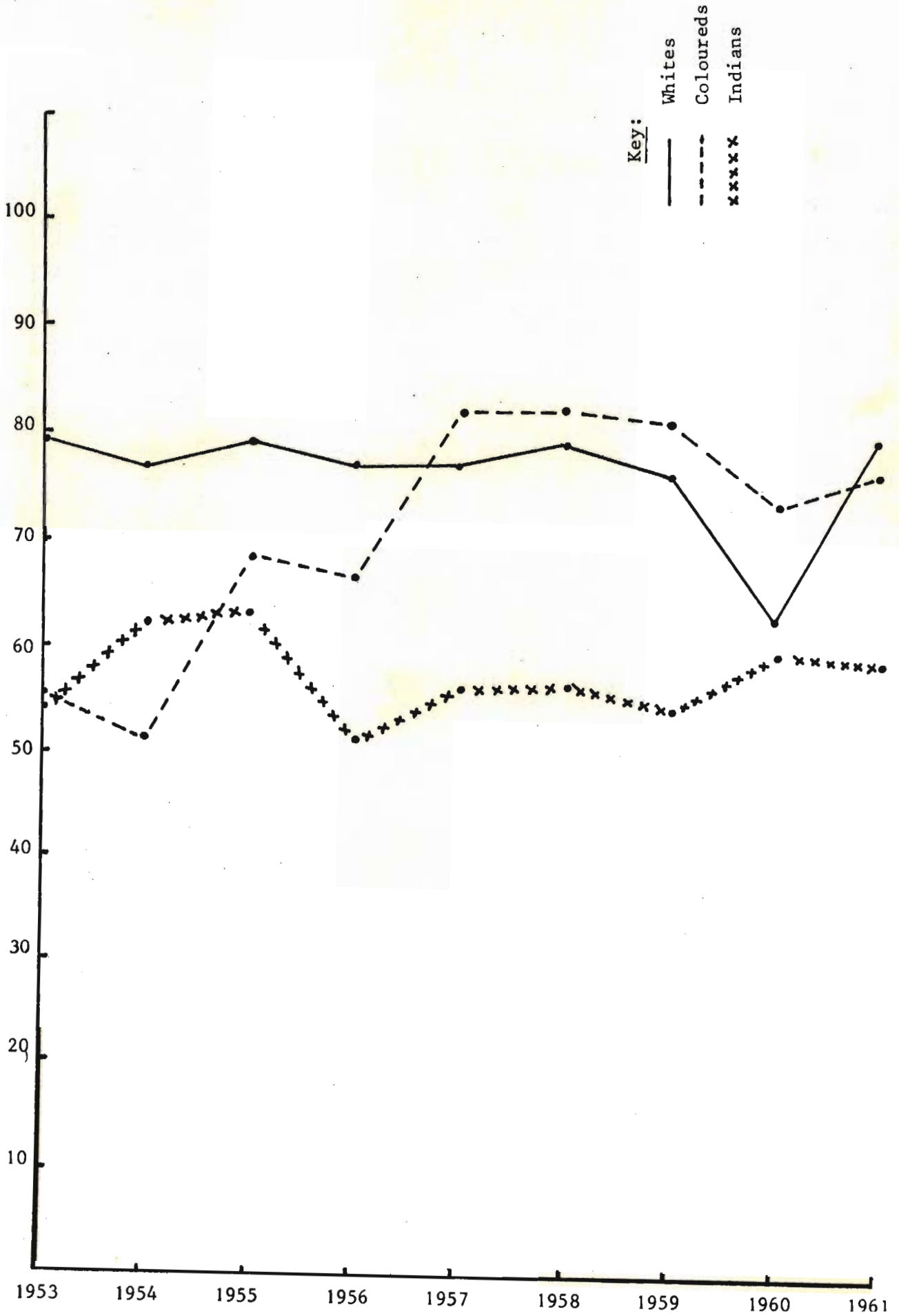




TABLE 3.11  
RESULTS OF THE JUNIOR CERTIFICATE EXAMINATION  
FOR WHITES, COLOURED AND INDIAN CANDIDATES  
1953 - 1962

	WHITES					COLOURED					INDIANS				
	No. entered	No. passed	%	No. failed	%	No. entered	No. passed	%	No. failed	%	No. entered	No. passed	%	No. failed	%
1953	2 009	1 595	79	414	21	132	72	55	60	45	1 053	577	54	476	46
1954	2 190	1 698	77	492	23	129	66	51	63	49	992	616	62	376	38
1955	2 315	1 831	79	484	21	149	102	68	47	32	951	598	63	353	37
1956	2 548	1 955	77	593	23	136	90	66	46	34	975	502	51	473	49
1957	2 691	2 073	77	618	23	138	113	82	25	18	1 188	665	56	523	44
1958	2 902	2 290	79	612	21	154	126	82	28	18	1 268	715	56	553	44
1959	3 253	2 460	76	793	24	156	126	81	30	19	1 369	737	54	632	46
1960	3 557	2 198	62	882	23	178	129	73	42	23	1 765	1 041	59	642	36
1961	4 215	3 368	79	895	21	200	152	76	48	24	2 131	1 229	58	902	42
1962	4 478	3 512	78	966	21	250	138	55	112	45	2 241	1 385	62	856	38
Average			78		22			68		32			58		42

During this period an average of 94% of the Indian pupils took Latin as their second language, and only about 6% took Afrikaans. An average of nearly 88% of the candidates took Mathematics. Fifty percent of the candidates failed to pass in Latin and nearly 47% of the candidates failed in mathematics during this period. <sup>(11)</sup>

(ii) Under the Department of Indian Affairs

In 1967 the Department of Indian Affairs introduced the system of streaming in the secondary schools. In that year the pupils already in Standard VIII were given the opportunity to opt for the Advanced Grade or the Ordinary Grade. In 1967 only 929 pupils out of a total of 4 104 Standard VIII pupils in Natal entered to write the Standard VIII examination on the Ordinary Grade. This represented only 12% of the total Standard VIII candidates. From 1968 onwards the pupils in Standard VIII were classified on the basis of their overall results when they were in Standard VI.

The results of the Standard VIII external examination under the system of streaming are presented in the accompanying Table 3.12.

The results shown in Table 3.12 appear to have improved slightly over the results prior to streaming as shown in Table 3.11. Prior to streaming the average *failure* rate during the period 1953 to 1962 was approximately 42%. After streaming the average *failure* rate during the period 1967 to 1971 was about 31%.

The percentage of Advanced Grade *failures* converted to Ordinary Grade passes was more or less consistent at about the 12% level, except in 1971 when it was 19%.

TABLE 3.12

RESULTS OF THE STANDARD VIII EXAMINATION OF THE DEPARTMENT  
OF INDIAN AFFAIRS: 1967-1971

ADVANCED GRADE	1967		1968		1969		1970		1971	
	No.	%	No.	%	No.	%	No.	%	No.	%
No. of entries	3 175		3 425		3 762		3 315		3 472	
No. of passes with merit	113	4	131	4	206	6	157	5	159	5
No. of passes Advanced Grade	1 548	49	1 600	47	1 956	52	1 829	50	2 012	58
No. of passes Ordinary Grade	335	10	419	12	465	12	379	11	673	19
No. of failures	1 180	37	1 275	37	1 135	30	1 107	33	628	18
ORDINARY GRADE										
No. of entries	929		1 552		2 405		2 732		2 955	
No. of passes	582	63	856	55	1 271	53	1 089	39	1 839	62
No. of failures	347	37	696	45	1 134	47	1 643	61	1 116	38



The *failure* rate in the Ordinary Grade appears to be much higher than that of the Advanced Grade. The *failure* rate in 1970 was 61% compared with the average *failure* rate of 45% for the period 1967 to 1971.

It would seem that the Ordinary Grade was either beyond the ability range of a bulk of the pupils or the demands of the examination were too stringent.

### 3.3.3 The Results of the Senior Certificate Examination

In this section the results of the Senior Certificate examination will be presented and discussed for the following periods:

- (a) 1953 to 1963: the period prior to the system of streaming in Natal schools;
- (b) 1965 to 1974: the period during which Senior Certificate candidates were subjected to the system of streaming;
- (c) 1975 to 1977: the period under the new system of differentiated education.

#### (i) The period prior to Streaming: 1953 to 1963

In 1953 the Natal Education Department introduced its own Natal Senior Certificate examination. Prior to this date the candidates from Natal wrote the Matriculation examination of the Joint Matriculation Board.

During this period Whites, Coloureds and Indian candidates from Natal wrote the common Natal Senior Certificate examination. There-

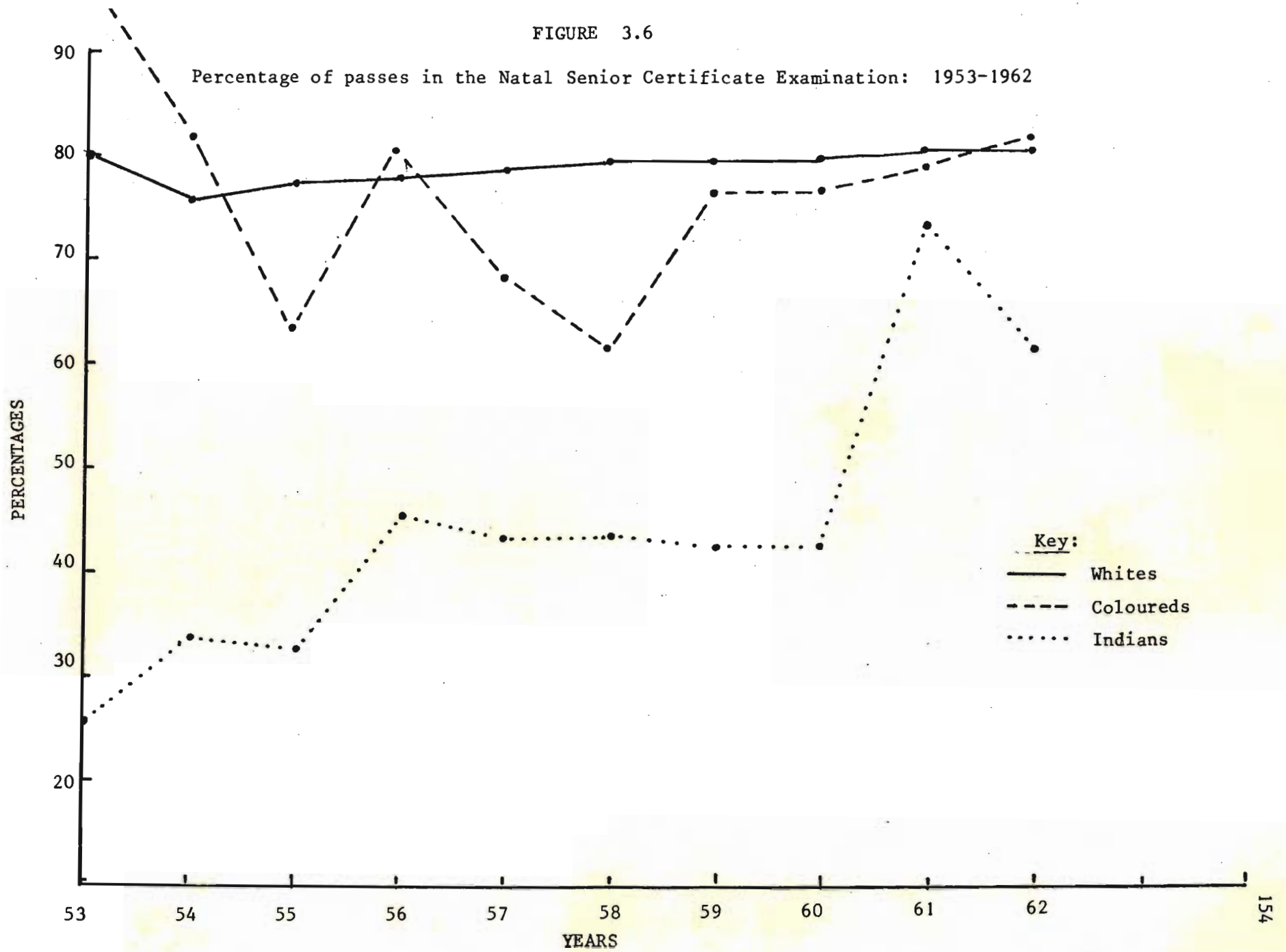
TABLE 3.13  
RESULTS OF THE NATAL SENIOR CERTIFICATE EXAMINATION  
FOR WHITES, COLOUREDS AND INDIANS  
1953-1962

Year	WHITES					COLOUREDS					INDIANS				
	No. Entered	No. Passed	%	No. Failed	%	No. Entered	No. Passed	%	No. Failed	%	No. Entered	No. Passed	%	No. Failed	%
1953	733	586	80	147	20	4	4	100	-		336	89	26	247	74
1954	757	572	76	185	24	28	23	82	5	18	296	100	34	196	66
1955	900	698	78	202	22	33	21	64	12	36	313	103	33	210	67
1956	1 020	801	79	219	21	32	26	81	6	19	459	212	46	247	54
1957	1 008	793	79	215	21	42	29	69	13	31	456	202	44	254	56
1958	1 132	905	80	227	20	47	29	62	18	38	457	202	44	255	56
1959	1 216	972	80	246	20	40	31	77	9	23	466	201	43	269	57
1960	1 456	1 157	80	299	20	50	37	74	13	26	530	315	59	224	41
1961	1 641	1 341	81	300	19	81	64	79	17	21	553	412	74	141	26
1962	1 865	1 507	81	358	19	60	49	82	11	18	660	399	62	243	38
Average			79		21			77		23			46		54

Source: Province / Natal: Reports of the Director of Education - 1953 - 1962

FIGURE 3.6

Percentage of passes in the Natal Senior Certificate Examination: 1953-1962





fore up to 1962, the results of the examination will be presented and discussed on a comparative basis.

As mentioned earlier, prior to the system of streaming, Indian candidates were offered a narrow and restricted curriculum. The subjects offered were mainly restricted to English, Latin, mathematics, history, geography and biology. Very few Indian secondary schools were in a position to offer Afrikaans. As a result the majority of Indian candidates were handicapped in the choice of a second official language.

The results of the Natal Senior Certificate examination are presented in the accompanying table and graph.

With reference to Table 3.13 and Figure 3.6 it will be seen that in the first Natal Senior Certificate examination held in 1953, 74% of the Indian candidates failed against 20% *failures* among the White candidates. The *failure* rate for Indian candidates is quite high considering the fact that out of a total school population of 66 356 in that year, only 336 candidates wrote the Natal Senior Certificate examination. It must be remembered that during this time, there was a high premium for admission to secondary schools because of limited secondary school accommodation. Pupils reaching the Senior Certificate stage were a select and perhaps a highly motivated group.

In the first ten-year period there appears to be much fluctuation in the results of the Indian and Coloured candidates whilst the results of the White candidates appear to be more or less stable. The Indian pass rate fluctuated from 26% in 1953 to 74% in 1961. Although the pass rate for Coloureds appears to be better than those

of the Indian candidates, there is greater fluctuations in the Coloured results than the Indian results. In 1953, only 4 Coloured candidates wrote the Natal Senior Certificate examination and all four passed. Between the years 1955 and 1958 the Coloured pass rate shows an erratic tendency. However, from 1959 onwards, the results reached some stability.

According to Malherbe<sup>(12)</sup>, the factor that one would expect to have the biggest influence on the percentage of passes in the examination from one year to the next would be a variation in the requirements laid down by the examining body. For example, changes in the compulsory grouping of subjects, in subject syllabuses and the marks required for passes in particular subjects as well as in the aggregate of the examination as a whole.

As there was hardly any significant change in the pass requirements for the Natal Senior Certificate examination during 1953 to 1963, the reasons for the high *failure* rates obtained by Indian candidates, therefore, cannot be entirely due to the minimum pass requirements. This then suggests that there may be other reasons for the high *failure* rate among the Indian candidates. Among other reasons, there could be the problem of the narrow and restricted curriculum offered to the Indian candidates compounded by the absence of differentiation in the educational system. There was also the problem of a shortage of adequately qualified teachers to handle the senior classes.

(ii) Results of the Natal Senior Certificate Examination under the System of Streaming into the Advanced and Ordinary Grades:  
1965 to 1974

As mentioned in the previous chapter, the Natal Education Department



introduced the system of streaming into the Advanced Grade and the Ordinary Grade in the White schools in 1962. The first group of White candidates under the system of streaming sat for the Natal Senior Certificate examination in the Advanced and Ordinary Grades at the end of 1965. Indian and Coloured Senior Certificate candidates, in the absence of streaming, wrote the Natal Senior Certificate examination on only one grade - i.e. the Advanced Grade. This practice continued until Indian and Coloured education was transferred to the Departments of Indian and Coloured Affairs respectively.

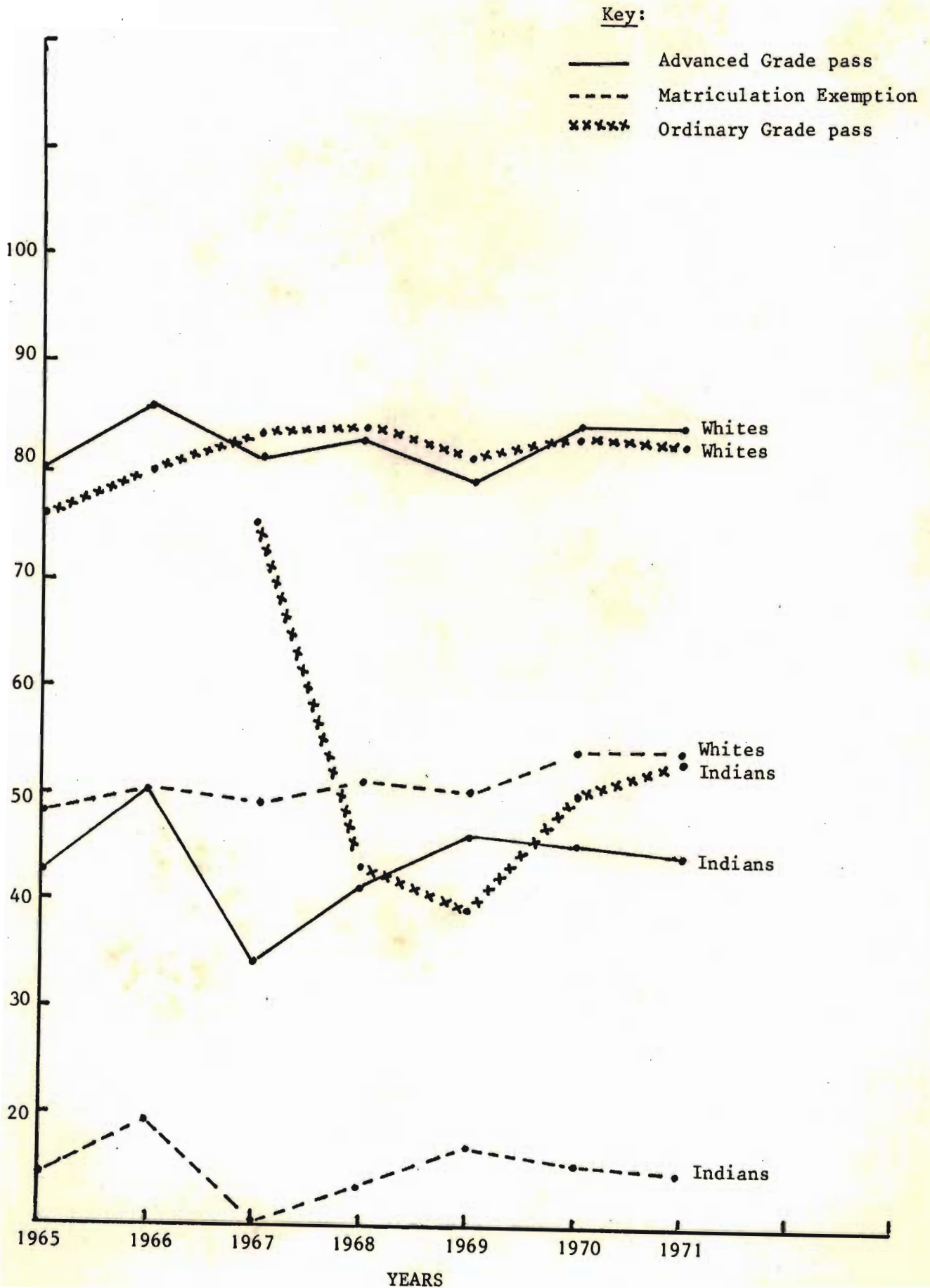
In 1967 the Department of Indian Affairs introduced the Natal system of streaming in its schools. Although streaming into the Advanced and Ordinary Grade began in Standard VII, all pupils who were in Standards VIII to X in 1967, were given the opportunity of voluntarily following either the Advanced or the Ordinary Grade.

However, very few Indian candidates, especially in Standard X opted to write the Natal Senior Certificate examination on the Ordinary Grade. For example, only 16 candidates wrote the Natal Senior Certificate examination on the Ordinary Grade in 1967.

With reference to Figure 3.7 and Tables 3.14 and 3.15 it will be noticed that in the Natal Senior Certificate Advanced Grade examination, the overall pass rate in respect of the White candidates shows only slight fluctuations between 80% to 85%, whereas, the overall pass rate in respect of the Indian candidates shows extreme fluctuations. In 1965, the pass rate was 42% then it rose to 50% in the



Percentage of passes in the Natal Senior Certificate Examination  
1965-1971: Whites and Indians in Natal Schools.



following year and then plunged to 34% in 1967, and then began to rise in 1968 and 1969 to reach a measure of stability after 1969.

The percentage of Indian candidates passing with Matriculation exemption also shows extreme fluctuations. In 1967 only 10% of the Indian candidates obtained Matriculation exemption against 50% obtained by the White candidates in the same year.

The results of the Ordinary Grade examination in respect of the Indian candidates also show extreme fluctuations as compared with the results of the White candidates.

Although the number of Indian candidates who wrote the Natal Senior Certificate examination on the Ordinary Grade increased from the years 1968 to 1970, the percentage of passes in this grade was disappointingly low. One of the possible reasons for the high failure rate in the Ordinary Grade examination was that nearly all the Indian candidates took mathematics and Latin. The syllabus for Latin was common to both the Advanced Grade and the Ordinary Grade. A common examination paper was set for both the grades. For example, 77,7% of the Indian candidates failed in Latin in the Ordinary Grade in 1968 and 42,2% failed in mathematics in the same examination. (13)

In 1971, Natal Indian candidates wrote the Natal Senior Certificate examination under the rules of the Natal Education Department for the last time. As from the November/December examination of 1972, all Indian candidates wrote the Senior Certificate Examination under the rules of the Department of Indian Affairs. As stated in the previous chapter, from 1972 to 1974, the Department of Indian

TABLE 3.14

RESULTS OF THE NATAL SENIOR CERTIFICATE EXAMINATIONFOR WHITES AND INDIANSADVANCED GRADE : - 1965- 1971

Year	WHITES							INDIANS						
	No. Entered		Passed		Failed		No. Entered		Passed		Failed			
	Advanced	% Ordinary	%	No.	%	Advanced	% Ordinary	%	No.	%				
1965	2 594	1 870	73	193	7	531	20	1 328	399	30	163	12	766	58
1966	2 478	1 931	78	168	7	379	15	1 551	562	37	204	13	785	50
1967	2 572	2 067	81	231	9	274	10	1 631	541	34	196	12	894	54
1968	2 664	2 198	83	197	7	269	10	1 862	770	41	244	13	848	46
1969	2 607	2 064	79	228	9	315	12	1 442	660	46	193	13	589	41
1970	2 971	2 503	84	169	6	299	10	1 523	691	45	171	11	661	44
1971	2 971	2 509	84	181	6	281	10	1 948	859	44	176	9	913	47
Average %			80		7		13			40		11		49

(Source: Province of Natal: Reports of the Director of Education 1965 - 1971)



TABLE 3.15  
RESULTS OF THE NATAL SENIOR CERTIFICATE EXAMINATION  
FOR WHITES AND INDIANS IN NATAL  
ORDINARY GRADE : 1966-1971

Year	WHITES					INDIANS				
	No. Entered	No. Passed	%	No. Failed	%	No. Entered	No. Passed	%	No. Failed	%
1966	923	745	80	178	20	-	-	-	-	-
1967	933	773	83	160	17	16	12	75	4	25
1968	1 105	933	84	172	16	253	110	43	143	57
1969	1 133	918	81	215	19	378	149	39	229	61
1970	1 203	1 004	83	199	17	515	255	50	260	50
1971	1 204	998	82	206	17	874	465	53	409	47
Average %			82		18			52		48

(Source: Province of Natal: Reports of the Director of Education  
For the Years 1966-1971)

Affairs purchased the Senior Certificate examination papers from the Natal Education Department, but the Department of Indian Affairs was allowed to appoint its own sub-examiners from the ranks of the Indian teaching personnel. Certification was done by the Department of Indian Affairs.

The results of the Senior Certificate examination held under the rules of the Department of Indian Affairs, are analysed in detail in the accompanying table. As the results of the 1972 Senior Certificate examination do not show much difference from the 1971 results, only the results of the last two years (1973 and 1974) under the old system of streaming are presented.

The results set out in Table 3.16 show a marked improvement in the percentage of candidates passing on the Advanced Grade. From an average of 44% pass rate on the Advanced Grade in the previous three years, the average for 1973 and 1974 increased to about 57%. The percentage of candidates passing with Matriculation exemption has also improved significantly. In the previous three years the average percentage of Indian candidates passing with Matriculation exemption was 16%. This percentage increased to an average of about 24% in 1973 and 1974. There was an improvement in the percentage of Indian candidates passing with merit. For the previous three years, the average percent of merit passes was 2%, whereas, in 1973 and 1974 the average percentage of merit passes rose to 3,4%.

#### 3.3.3.1 Failure According to Subjects

In Table 3.17, *failure* according to subjects is detailed. The percentage of *failure* in a particular subject was determined by the number of candidates obtaining symbol FF (which is between 30 and 33%)



and below, expressed as a percentage of the total number of candidates who wrote that particular subject.

TABLE 3.16

TABLE SHOWING THE NUMBER OF INDIAN CANDIDATES WHO WROTE THE SENIOR CERTIFICATE ADVANCED GRADE EXAMINATION, WHO PASSED THE EXAMINATION, WHO OFFERED RECOGNISED SUBJECTS FOR EXEMPTION, WHO QUALIFIED FOR EXEMPTION AND THE PERCENTAGE WHO QUALIFIED FOR EXEMPTION - FOR THE REPUBLIC

	1973	1974
No. of Candidates who took whole examination	2 159	2 222
No. of passes: Advanced Grade	1 276	1 227
Ordinary Grade	246	260
Percentage of Passes: Advanced Grade	59,10	55,20
Ordinary Grade	11,39	11,70
Percentage of merit Passes	3,56	3,73
Percentage of passes	68,8	66,2
Percentage of Failures	31,12	33,08
No. of Candidates who took recognised subjects for Exemptions from Matriculation	2 107	2 177
No. who qualified for Exemption	507	539
Percentage of Candidates who took whole examination and who qualified for Exemption	24,06	24,76
Percentage of Candidates who took subjects for Exemption and qualified for Exemption	22,22	46,80

(Source : Division of Education - Department of Indian Affairs -  
File 19/46/4/3)



TABLE 3.17

PERCENTAGE OF INDIAN CANDIDATES WHO FAILED IN THE VARIOUS  
SUBJECTS IN THE SENIOR CERTIFICATE EXAMINATION ADVANCED

GRADE: 1972 - 1974

SUBJECT	1972		1973		1974	
	% Failed FF	M	% Failed FF	M	% Failed FF	M
English Higher	18,44	41	9,44	43	7,03	44
Afrikaans Lower	28,96	39	22,14	39	16,89	42
Latin	49,03	32	37,41	36	57,4	31
Mathematics	35,68	39	34,39	41	42,37	41
Biology	29,22	40	19,98	40	32,1	38
Physical Science	11,55	46	16,22	46	13,36	46
Geography	33,61	39	20,28	43	39,53	37
Domestic Science	20,54	41	8,75	43	6,51	47
History	9,75	50	15,04	49	16,75	49
Accountancy	14,78	47	9,62	49	6,39	50
Typing	-	68	-	62	7,41	48

Note: (i) FF = 30 - 33½%

(ii) M = Median percent

(Source - Department of Indian Affairs - Division of Education -  
File 19/20/2)

From Table 3.17 the following picture emerges:

The percentage of *failure* in English Higher shows a steady drop over the three years. The medium mark also increased during the same period.

The position of Afrikaans has also improved during the three years, although the median percentage has not improved much.

The performance in Latin appears to be with a high failure rate of 49,03% in 1972, 37,4% in 1973 and rising to 57,4% in 1974. The

median percentage is below the minimum pass requirement of 33 $\frac{1}{3}$ % in a subject for 1972 and 1974.

Apart from Latin, mathematics shows a high percentage of failure in comparison with other subjects. Geography is a close third.

### 3.3.3.2 Ratio of Boys and Girls failing in subjects

In order to determine the *failure ratio* between boys and girls in the subjects failed, an analysis was made of all candidates who wrote the whole Senior Certificate examination on the Advanced Grade and failed the examination in 1972 to 1974. The analysis excludes those candidates who passed but who failed in not more than one subject. Nor are the results of those candidates who were either wholly or partially absent for the examination included in the analysis. There were some candidates, who had written the Senior Certificate examination on the Ordinary Grade at a previous sitting. These candidates who passed the Ordinary Grade and who satisfied certain minimum requirements were allowed to write a few subjects on the Advanced Grade in order to obtain Matriculation exemption. Such candidates were also excluded from the analysis.

In the Senior Certificate examination a candidate has to pass a minimum of five subjects and pass the minimum aggregate. It is possible to pass all the six subjects by just obtaining the minimum of 33 $\frac{1}{3}$ % in each subject and yet fail the whole examination by failing to obtain the required aggregate. For example a candidate could obtain the minimum of 33 $\frac{1}{3}$ % in each subject and this would give him an aggregate of 632 marks. But in order to pass he requires 760 marks which is 40% of the total marks.

The analysis in respect of the Advanced Grade subject *failure* among male and female candidates is set out in Table 11.0.10



TABLE 3.18

RATIO OF BOYS AND GIRLS FAILING IN THE VARIOUS  
SUBJECTS IN THE SENIOR CERTIFICATE EXAMINATIONS  
OF 1972-1974 IN RESPECT OF INDIAN MALE AND FE-  
MALE CANDIDATES : ADVANCED GRADE

SUBJECT	Percentage of Failures				Percentage of Failures				Percentage of Failures			
	1972				1973				1974			
	M No.	%	F No.	%	M No.	%	F No.	%	M No.	%	F No.	%
English	209	67,9	99	32,1	131	73	49	27	114	73	42	27
Afrikaans	134	62	82	38	141	64	80	26	165	69	75	31
Latin	163	63	97	37	45	66	23	34	26	70	11	30
Biology	158	54	133	46	135	54	116	46	255	57	193	43
Physical Science	18	67	9	33	27	50	27	50	46	64	26	26
Mathematics	224	55	187	45	210	56	163	44	259	56	206	44
History	33	70	14	30	34	47	38	53	33	52	31	48
Geography	245	56	193	44	137	59	96	41	239	57	180	43
Accountancy	54	42	74	58	66	59	45	41	51	49	54	51
Commerce	-	-	-	-	-	-	-	-	6	86	1	14
Typing	-	-	-	-	-	-	-	-	2	33	4	67
Housecraft	-	-	-	-	-	-	-	-	-	-	11	-

M = Male

F = Female

Note: The figures for 1972 are for Natal candidates only, 1973 and 1974 figures are for the Republic.  
 (Source: Department of Indian Affairs - Division of Education - Examination Schedules.)



With reference to Table 3.18 it is observed that in almost all subjects except in accountancy, the girls perform better than the boys. There are fewer girls failing in the various subjects.

In a study carried out in the Swedish secondary schools in 1953<sup>(14)</sup> it was found that the overall percentage of failure is much higher among boys than girls. But it would be rash to conclude that the girls are superior to the boys simply on the figures shown in the analysis. The actual number of girls is approximately half that of the number of boys and therefore it is quite likely that the girls' group represents a better selection.

(iii) Results of the Senior Certificate Examination:

Under the New System of Differentiated Education

At the end of 1975, Indian candidates wrote the first Senior Certificate Examination under the requirements of the new system of differentiated education. A glance at the results of the new Senior Certificate examination held in 1975 and 1976 as set out in Table 3.19 shows that the pass rate in these two examinations have improved considerably compared with the results of the two years immediately prior to the introduction of the new education programme. In 1973 and 1974 the percentage of passes in the Senior Certificate examination was 68,8% and 66,12% respectively. In the 1975 and 1976 examinations the percentage of passes was 85,0% and 86,4% respectively.

However, the percentage of candidates who obtained Matriculation exemption in these two years had not shown any appreciable increase. In the 1975 and 1976 Senior Certificate examinations, candidates aiming for the Matriculation exemption could have possibly been affected by the restrictions by the Joint Matriculation Board in re-

spect of subject grouping. For example, accountancy taken on the Higher Grade was not accepted as one of the three Higher Grade subjects for Matriculation exemption, except for those candidates following a commercial field of study. Another restriction was that in order to obtain a Matriculation exemption, a candidate had to pass at least five subjects from each of four different groups. These restrictions were removed in 1976 and in 1977. The schools were informed on 6 August 1976 that the Joint Matriculation Board would recognise accountancy on the Higher Grade as one of the three compulsory Higher Grade subjects, provided it remains a Group F subject, and that a pass in accountancy on the Higher Grade will only be recognised as one of the three Higher Grade subjects for Matriculation exemption if, mathematics at least on the Standard Grade is also passed. In June 1977 the Department of Indian Affairs informed its schools of another amendment by the Joint Matriculation Board, namely, that candidates for Matriculation exemption could either pass in at least five subjects from each of four different groups *or two subjects from Group C or Group E and one subject from each of two other groups.* (15)

These amendments were announced to schools long after the candidates had already embarked on their course of study. The full effects of these amendments could only be felt in the Senior Certificate examination of 1977 and thereafter.

In Table 3.20 details of the percentage of pupils passing and failing in individual subjects in the Senior Certificate examinations is analysed. It will be noticed that the pass rate of individual subjects in the 1975 Senior Certificate examination is much better than

the results of the 1976 examination. In almost all the subjects taken on the Higher Grade in 1976, the percentage of passes is lower than the passes in the 1975 examination. For example the pass rate in individual subjects taken on the Higher Grade in 1976 shows a decrease of between 15% and 20% from that of the 1975 examination. Subjects in which this big decrease occurred are: English first language, Latin, mathematics, physical science, biology, history, geography, economics and home economics. On the other hand there is no great difference in the pass rate in individual subjects taken on the Standard Grade during the two years.

TABLE 3.19

RESULTS OF THE 1975 AND 1976 SENIOR CERTIFICATE EXAMINATION  
WRITTEN UNDER THE REQUIREMENTS OF THE NEW SYSTEM OF DIFFERENTIATED EDUCATION IN RESPECT OF ALL INDIAN CANDIDATES IN THE  
REPUBLIC

	1975		1976	
	No.	%	No.	%
No. of full-time candidates	4 327	-	4 198	-
No. of Senior Certificate passes	2 669	61,7	2 520	60,2
No. of Matriculation Exemptions	1 010	23,3	1 101	24,0
Total of Senior Certificate and Matriculation passes	3 679	85,0	3 630	86,4
No of candidates who took subjects to qualify for Matriculation exemption	1 828	42,2	2 577	61,3
No. who took Matriculation exemption subjects and obtained exemption	1 010	55,5	1 101	42,7
No. of failures	648	15,0	568	13,6



The possible explanation for the difference in the pass rate in the subjects taken on the Higher Grade could be that in 1976 more pupils were allowed to enter for subjects on the Higher Grade than in 1975. In the 1975 examination it will be noticed that a comparatively smaller percentage of subjects failed in the Higher Grade was converted to a pass on the Standard Grade than was the case in 1976. For example in 1975, only 2,7% of the candidates who failed English on the Higher Grade had their failure converted to Standard Grade pass, against 22,4% in 1976. The conversion of Higher Grade failure into Standard Grade pass in 1976 was about twice that of 1975 in such subjects as physical science, biology, geography and economics.

The overall results in the two Senior Certificate examinations written under the requirements of the new system of differentiated education appears to have improved to a great extent.

The improvements in the results of the Senior Certificate examination under the new system of differentiated education, could be due to several factors. Firstly, it could be due to the principle of differentiation, whereby the educational programme sets out to provide for the individual interests, ability and aptitude. There is also the school guidance service which could have contributed in some small measure in advising pupils on the selection of the study direction. Secondly, with the introduction of differentiated education in Indian schools, the syllabi in the various subjects were restructured with emphasis on style and content. Loosely stated aims have been replaced by achievable and measureable objectives. (16)

Teacher education programme has also been restructured to prepare teachers to meet the demands of a new educational programme. Super-

TABLE 3.20

PERCENTAGE OF PASS AND FAILURE IN INDIVIDUAL SUBJECTS IN THE  
SENIOR CERTIFICATE EXAMINATION UNDER THE NEW DIFFERENTIATED EDUCA-  
TION IN RESPECT OF THE TOTAL INDIAN CANDIDATES IN THE REPUBLIC

	1975					1976				
	Entered on Higher and passed on Higher	Entered on Higher and passed on Standard	Entered on Higher and failed	Entered on Standard and passed	Entered on Standard and failed	Entered on Higher and passed	Entered on Higher and passed on Higher	Entered on Higher and failed on Standard	Entered on Standard and passed	Entered on Standard and failed
	%	%	%	%	%	%	%	%	%	%
English 1st Language	96,7	2,7	0,6	98	2	76,9	22,4	0,7	98	2
Afrikaans 2nd Language	80,8	9,4	9,8	77	23	86,6	7,1	6,3	88	12
Mathematics	75,8	16,5	7,7	77	23	59,6	25,4	15,0	68	32
Physical Science	84,1	13,5	2,4	81	19	67,4	28,1	4,5	81	19
Biology	63,6	24,9	11,5	78	22	43,3	47,5	9,2	90	10
Latin	97	-	3	-	-	80,0	15,5	4,5	-	-
History	81,6	10,6	7,8	81	19	61,0	30,6	8,4	81	19
Geography	77,4	17,6	5,0	78	22	55,4	38,8	5,8	80	20
Economics	81,4	11,5	7,1	63	37	59,8	37,0	3,2	81	19
Accountancy	94,9	4,5	0,6	93	7	84,7	13,1	2,2	93	7
Home Economics	100	-	-	100	-	80	-	20	100	-
Technical Drawing	61,7	29,4	8,9	30	70	88,8	-	11,2	93	7
Woodwork	-	-	-	100	-	-	-	-	96	4
Metalwork	-	-	-	100	-	-	-	-	96	4
Needlework & Clothing	-	-	-	100	-	-	-	-	96	4
Housecraft	-	-	-	94	6	-	-	-	94	6
Typing	-	-	-	95	5	-	-	-	94	6
Business Economics	-	-	-	91	9	-	-	-	90	10

NOTE: The above details are in respect of the most common subjects taken by candidates. The Table excludes certain technical subjects.

(Source: Department of Indian Affairs. Division of Education File No. 19/20/2)



vision of instruction in the schools is now based on a functional basis where the Academic Inspectors of Education are appointed on a subject-specialist basis and the Circuit Inspectors are appointed to supervise general school organisation. All these factors could have contributed to the improvements in the examinations.

#### 3.4 AN OVERVIEW

In the preceding sections of this chapter, data on the incidence of success and failure in Indian secondary education were presented. Comparative figures were also given for the White, Coloured and Indian Candidates when these three groups wrote common Junior and Senior Certificate examinations under the Natal Education Department. In other cases, the results of White and Indian candidates, especially in the Natal Senior Certificate Examination, were given. From these comparative data it would seem that the White candidates did very much better in the examinations than the Coloured and Indian candidates. For example, we noticed in Figure 3.6 that during the ten year period between 1953 and 1962 the pass rate of the White candidates in the Natal Senior Certificate examination was an average of 80% while the Indian pass rate was an average of 45% during the same period. Only in 1961 and 1962 did the pass rate of the Indian candidates reach the 60% level.

There is a big difference between the pass rates of White and Indian candidates. While there may be several reasons for this big difference in the pass rates between Whites and Indians, it is not the intention here to discuss all of them. However, some of the differences in the pass rates could possibly be accounted for by the obvious differences in the curriculum provided in the White and Indian schools;



the absence of streaming in Indian schools, and presumably the non-application of statistical adjustments of raw examination marks in respect of the Indian candidates.

#### 3.4.1 Prior to streaming in Indian Schools

It has been often mentioned in this study, that Indian pupils in secondary schools had to contend with a narrow and restricted curriculum for many decades. Furthermore, there was no consideration given to the individual needs, aptitudes, ability and interests. Every child, regardless of his interest and ability was given the "straight six" academic type of education. All secondary pupils in Indian schools had no choice but to take mathematics, Latin, history and geography. It made little difference whether a pupil liked such subjects as Latin and mathematics. The education system decided for the pupil that Latin and mathematics were good for him. As the number and variety of secondary pupils increased, the "straight six" course, namely English, Latin, history, geography, biology and mathematics, prescribed for Matriculation did not suit all the pupils. These subjects were all that the schools offered at the time and the pupils had no option but to take them whether they went to the University or not. However, in the early sixties physical science and bookkeeping were introduced, thus allowing a small measure of choice as pupils were allowed to offer bookkeeping in place of history.

Although the need for differentiation in the education of pupils of widely varying abilities in the same class had long been recognised, in Natal Indian secondary schools, a system of differentiation

based on streaming into the Advanced and Ordinary Grade was only introduced in 1967. The high *failure* rate in Indian secondary education prior to the introduction of differentiation could partially be attributed to the fact that, pupils who were not destined for university education, were obliged to take the kind of subjects on an academic level designed for the selection of pupils entering university. The problem was further aggravated by a lack of differentiation in the subject content and in the methods of teaching an ever increasing number of Indian secondary pupils of increasingly varying abilities and aptitudes.

#### 3.4.2 The period during the system of Streaming in White Schools in Natal

It was stated earlier, that in 1946 the Wilks Committee recommended a system of differentiated education for Natal schools. The committee also recommended that any system of education for the Coloureds and Indians should not differ fundamentally from those of Whites.<sup>(17)</sup> However, when in 1962 the Natal Education Department eventually introduced a system of streaming in White schools, it ignored the Wilks Committee recommendation that the education of the Coloureds and Indians should not differ in any fundamental way from that of the Whites, by excluding the Coloured and Indian schools from the system of streaming. Consequently, the Coloured and Indian pupils were deprived of the benefits that were expected to flow from the system of streaming into the Advanced and Ordinary Grades.

The results of the Junior Certificate examination prior to streaming show that the *failure* rate among Indian candidates for the period 1953 to 1962 (see Table 3.11) was an average of 42% against 32% and 22% for the Coloured and White pupils respectively.



The poor results attained by the Indian candidates in the Junior Certificate examination during this period could be due to the fact that more and more pupils of increasingly varying ability range were attempting a course of study which was mainly academic in nature. This position was further aggravated by the narrow and restricted school curriculum offered at the time.

In 1965 the Natal Senior Certificate examination was set on two separate levels - the Advanced Grade and the Ordinary Grade. Only White candidates wrote on either the Advanced Grade or on the Ordinary Grade. Coloured and Indian candidates had no option but to write on the Advanced Grade. The Advanced Grade course was designed to suit the needs of candidates wishing to enter university after obtaining Matriculation exemption. Thus all Coloured and Indian candidates, regardless of their abilities, had to write a course which was designed for university entrance.

The effects of this situation are graphically illustrated in Figure 3.7. In 1965 only 42% of the Indian candidates passed against 80% White candidates. From 1965 to 1971 the average percentage of passes among White candidates fluctuated only slightly between 79% and 86%, whereas the Indian candidates' results fluctuated between 34% and 50% during the same period. The percentage of White candidates obtaining Matriculation exemption between 1965 and 1971 also was very much higher than those obtained by the Indian candidates. In 1967, only 10% of the Indian candidates obtained Matriculation exemption, whereas 81% of the White candidates obtained Matriculation exemption. The average percentage of Indian candidates who obtained Matriculation exemption during the period 1965 to 1971 was as low as 14,7% whereas the corresponding average for the



White candidates was 81,3%.

Some of the reasons for this vast difference in the performance between the White and Indian candidates could, perhaps, be attributed to the following anomalies that existed at the time.

In the absence of streaming in Indian secondary schools, Indian candidates were deprived of the benefits flowing from streaming as in the White schools.

In the White secondary schools the pupils from the beginning of Standard VII were placed in either the Advanced Grade or the Ordinary Grade. Pupils were placed in separate classes which facilitated differentiated teaching. In Indian secondary schools all the pupils of varying ability range were placed in common heterogeneous class groups and teaching was normally aimed at the average to the detriment of the extreme ability groups.

All Indian pupils from Standard VII to X were regarded as Advanced Grade pupils from 1963 to 1966 and wrote the examination on the Advanced Grade only.

Prior to 1972 Indian teachers were not allowed to be appointed as sub-examiners. All examiners, moderators and sub-examiners were chosen from the ranks of the White teachers. Thus Indian teachers were not given any opportunity of gaining the experience in marking techniques. There was no feed-back on marking techniques and mark allocation. All that Indian schools received were the examiners' reports which were of a general nature. This lack of involvement of Indian teachers in the final evaluation of their candidates often led to much speculation and suspicion. Questions were asked whether the fact that the Marri-

culatation examination was conducted on racial lines had anything to do with the large number of Indian *failures* than White *failures*.<sup>(18)</sup>

### 3.4.3 The Period during Streaming in Indian Schools under the Department of Indian Affairs

In 1967 the Department of Indian Affairs introduced streaming in its secondary schools. This streaming system was based on the streaming pattern of the Natal Education Department.

It was shown in Table 3.1 that, with the introduction of streaming, the percentage of passes in Standard VI improved progressively from 39,6% in 1968 to 48,5% in 1970. The results in Standard VII during the period 1967 to 1970 also showed a marked improvement especially in the pass rate in the Advanced Grade. The same progress has been noticed in Standard VIII and Standard IX. However, it will be noticed that the *failure* rate in the Ordinary Grade in Standard VII to X was proportionately high. This suggests that the Ordinary Grade examination programme was beyond a large percent of Indian pupils.

According to Behr and MacMillan<sup>(19)</sup> the names Advanced and Ordinary Grades were misnomers. Below average pupils cannot be termed "Ordinary". In fact a Committee of Enquiry under the chairmanship of Professor R.E. Lighton set up in 1963 criticised this aspect and it stated that there should be three streams, A, B, and C for the above average, average and below-average groups.<sup>(20)</sup>

With reference to the Senior Certificate examination it was stated earlier that up to the March supplementary examination of 1972, the Natal Education Department fully controlled the Natal Senior



Certificate examination for both the Natal White and Indian candidates. As from November 1972, the Department of Indian Affairs arranged to purchase the Natal Senior Certificate examination papers for its Indian candidates. From this date, however, Indian candidates wrote the Senior Certificate examination under the rules of the Department of Indian Affairs. Indian sub-examiners were appointed to mark examination scripts under the supervision of White examiners appointed by the Natal Education Department. This practice continued until the end of 1974.

Referring to Table 3.16 it will be seen that the results of the Senior Certificate examination conducted by the Department of Indian Affairs appears to have improved appreciably. The average pass rate during these two years was about 57% against an average of about 44% for the two previous years. The percentage of Indian candidates passing with Matriculation exemption also showed a marked improvement after the introduction of streaming.

The experience gained by Indian sub-examiners appears to have permeated the Indian secondary schools. The beneficial influence of this experience appears to manifest itself in the improvement in examination results. Referring to Table 3.14 it will be observed that the average pass rate in the Senior Certificate examination of 1973 and 1974 was about 57% compared with an average of 44% for the previous two years.

Although the system of streaming in Indian schools did have a beneficial effect, the main criticism of this system was:

In Indian schools the selection into Advanced Grade and Ordinary Grade streams was based solely on the results of the Senior Certificate examination.



examination. Once placed in a particular stream it was not flexible enough to change streams during the year. Further, this system did not take into account that it was possible that a pupil who had passed on the Ordinary Grade, might have liked to take a particular subject on the Advanced Grade level. In fact the Lighton Committee<sup>(21)</sup> which was set up in 1973 on differentiation in Natal schools, criticised the selection procedure in the system of streaming as "too restrictive and inflexible".

#### 3.4.4. The Period during the introduction of the New System of Differentiated Education

The new system of differentiated education was introduced in Indian schools in 1973. This was the first time that an educational programme was designed to suit individual aptitude, interest and abilities. Although it will be premature at this early stage to evaluate critically the examination results under this new educational system, it will be necessary to comment on certain aspects.

Looking at the internal examination results, it would appear that there is a proportionately high percentage of pupils passing into the Practical Course. The Practical Course is planned for pupils of an IQ range of 80-90. In actual practice we find that pupils of above-average IQ are being placed in the Practical Course. The following data selected randomly from 25 schools, both primary and secondary, illustrate the point.

TABLE 3.21

INCIDENCE OF PUPILS WITH IQ RANGE OF 101-131 + IN THE PRACTICAL COURSE IN 25 INDIAN SCHOOLS IN 1977

I.Q.	Std. VI	Std. VII	Std. VIII
101 - 115	363	890	959
116 - 130	46	115	155
131+	1	2	7
Totals	410	1 007	1 121

Source: Information supplied by the Guidance Officer - Department of Indian Affairs.

From the above table and from the preceding discussion, it is evident that the proportionately high percentage of average and above-average pupils are being promoted into the Practical Course. This suggests that either the pupils are underachieving or the internal examinations are too stringent.

The process of sifting appears to be continuous in the Junior Secondary phase. It was noticed earlier on, that after the initial classification into the Academic Course based on the overall results of the final Standard V examination, the pupils who were placed in the Academic Course in Standards VI and VII still undergo the process of sifting. The sifting is apparently done solely on the results of the internal examinations. It is pertinent to ask whether the schools are manipulating the situation to place more pupils into the Practical Course so that only a select lot of pupils would attempt to write the prestigious Senior Certificate examination.



According to Brown<sup>(22)</sup> the "internal examination does not remove the evils of bad examining... it removes it only one stage further from public gaze".

In so far as the Senior Certificate examinations are concerned the new system of differentiated education appears to have a good effect on the examination results. However, an analysis of the passes in the individual subjects shows that too many candidates are still taking individual subjects on the Higher Grade. That the subjects taken on the Higher Grade are beyond the capabilities of some of the pupils is evidenced by the fact that the conversion of Higher Grade *failure* into pass on the Standard Grade is increasing.

The results of the examinations held under the new system of differentiated education show a greater percentage of passes. While this improvement in the results is in keeping with the principle of differentiation, whereby each individual pupil is given an educational programme to suit his individual needs, the general improvement also suggests other factors that could account for the overall improvement in the examination results. In summary these factors are, *inter alia*, the new approach to curriculum development with the emphasis on teaching objectives; better teaching methods with increasing use of educational technology; better supervision of instruction based on expert subject guidance by senior teachers and Academic Inspectors specializing in subject areas; better and adequate specialist facilities at schools, and the use of school guidance services.



The improvement, especially in the Senior Certificate examination, could also be attributed to the fact that candidates for the Senior Certificate examination have already gone through the process of sifting in the Junior secondary course as was shown earlier in this chapter. By the time the candidates reach the Senior Certificate examination, they are, therefore a selected group.

#### 3.4.5 The holding power of Indian schools

For many years the holding power of Indian schools or its reciprocal connotation, the drop-out rate has been determined by internal as well as external factors. Among the latter were, the lack of compulsory school attendance and socio-economic conditions.<sup>(23)</sup>

However, the internal factors possibly play even a greater role in influencing the drop-out rate than the external factors. According to Malherbe<sup>(24)</sup> there may be several factors which influence the drop-out rates in schools, but he says the schools themselves cannot escape some of the blame. Apart from failure of the educational system to offer an educational programme to suit the individual needs of pupils, the drop-out rate is also influenced by the hurdles set up by the school system by way of examinations at different stages in order to meet certain standards required by society in the economic and professional spheres. It has been shown earlier in this chapter, how pupils were forced to discontinue their schooling, if, in their Standard VI examinations, the pupils failed to pass with a continuation certificate.

For many decades, the educational programme was the same for all pupils, irrespective of their intellectual abilities. Under these

circumstances many who could not make the grade dropped out. There can, however, be big wastage in the education system even though there is no drop-out. The mere physical presence of pupils in school who have not the ability to cope with what is offered may be wasteful in so far as they may take up too much of the teacher's time to the detriment of the other pupils in the class. (25)

In the accompanying graph the holding power of Indian schools is illustrated for three periods, i.e. the period before streaming in Indian schools, the period during streaming in Indian schools and the period during the new system of differentiated education. In Figure 3.8 pupils in class (i) in a particular year are taken as 100% as a starting point. The end point of the particular year group is Standard X. Each successive class from class (ii) to Standard X is expressed as a percentage of the number of pupils in class (i) in the particular year.

From Figure 3.8 it can be seen that, with the introduction of streaming and differentiated education the holding power of Indian schools is improving. In 1966 only about 9% of the cohort reached Standard X and in 1976 the percentage of pupils reaching Standard X was 21%.

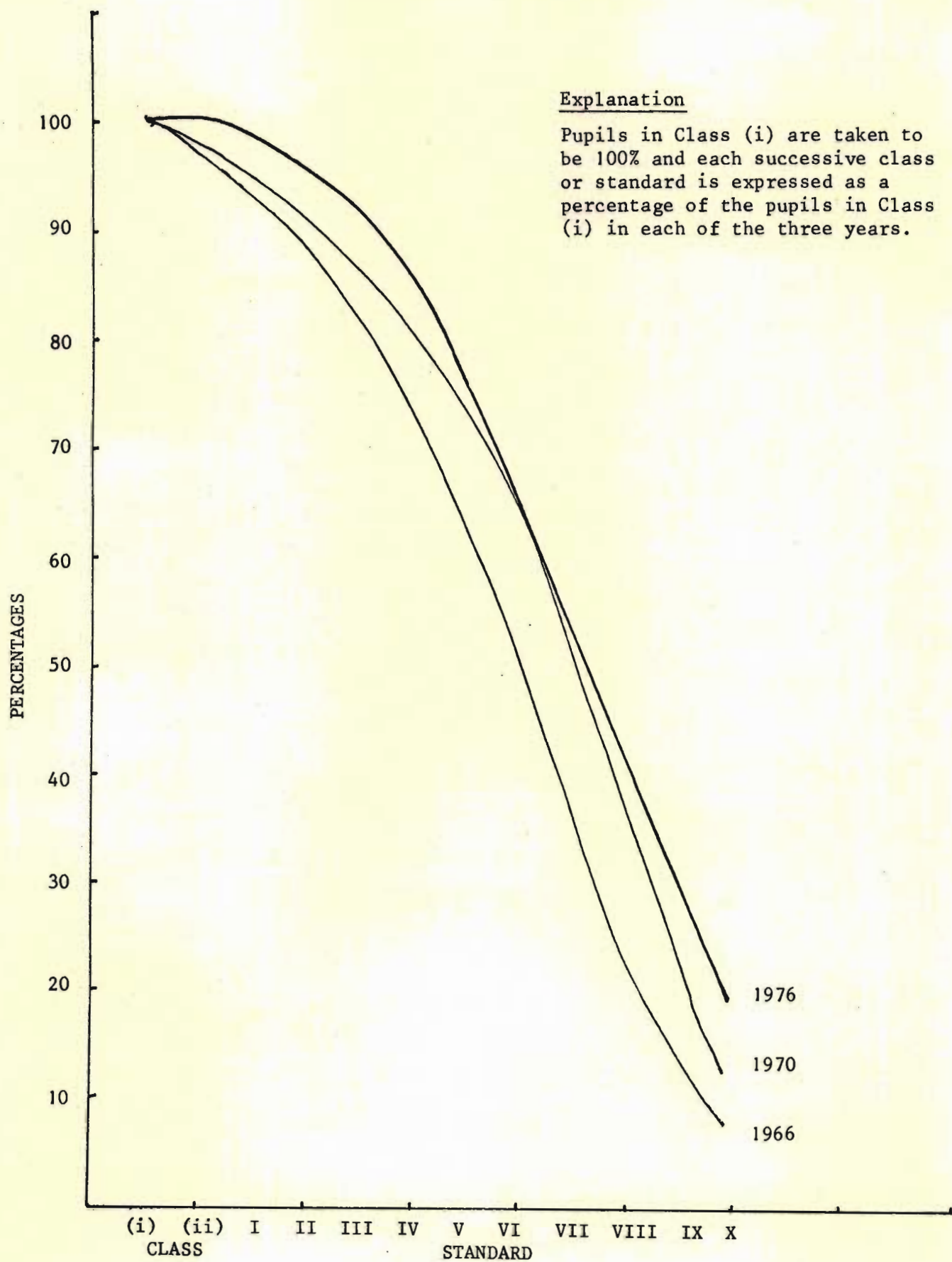
In Table 3.22 the elimination rate for every 100 pupils who entered Standard VI during the period 1972-1977 is set out.

Before the introduction of the new system of differentiated education in Indian schools, for every 100 pupils in 1966 in Standard VI, there were: (26)

62,6	pupils	in	Standard	VII	in	1967
49,9	"	"	"	VIII	in	1968
30,8	"	"	"	IX	in	1969
20,2	"	"	"	X	in	1970

FIGURE 3.8

Holding power of Indian Schools:- 1966-1970





After the system of differentiated education was introduced in Indian schools, for every 100 pupils in Standard VI in 1973, there were:

93,1 pupils in Standard VII in 1974  
 81,0 " " " VIII in 1975  
 38,9 " " " IX in 1976  
 29,9 " " " X in 1977

It will be noticed that after the introduction of the new system of differentiated education in Indian secondary schools, the holding power of the schools shows great improvement, especially in Standard VII and VIII. The position has not improved very much in the Standard IX and X. However, the position should improve as the new educational programme fully establishes itself.

TABLE 3.22

ELIMINATION OF SECONDARY PUPILS IN INDIAN SCHOOLS IN NATAL  
1972-1977

Year	Std. VI	Std. VII	Std. VIII	Std. IX	Std. X
1972	100	71,5	63,6	39,9	30,5
1973	100	81,9	58,3	45,1	28,6
1974	100	93,1	62,4	44,6	31,4
1975	100	93,9	81,0	34,4	27,4
1976	100	95,8	99,1	38,9	24,8
1977	100	94,7	99,5	49,6	29,9

(Source: Department of Indian Affairs - Division of Education.  
 Pupils Statistics File No. 19/46/2)

Although the system of differentiated education could be responsible for the improvement in the holding power in Indian secondary schools, there may be other factors as well which could be contributing to the decrease in the pupil elimination rate. The Indian community has always valued education and since the post-war years, the community has come to realise that in education lies the key to self-development. In this highly competitive industrial society where a prospective employer has to sift and select, take one and leave out another, the demands for intellectual ability are increasing all the time.

With greater job opportunities being opened up for Indians, the Indian youth realises that in order to compete for better and more lucrative jobs, a high level of education is a great advantage.

The standard of living of the Indians in the urban areas, has also improved and this improvement in the living standard has made it possible for the Indian parents to allow their sons and daughters to stay on longer at school.

#### REFERENCES

1. Department of Indian Affairs - Division of Education Circular No. I.E. g 1972 File No. 19/15/6/2.
2. Behr, A.L. and MacMillan, R.G.: *Education in South Africa* Van Schaik, Pretoria, 1971 p.173.
3. Lighton, R.E. cited by Behr and MacMillan *ibid* p.173.
4. Department of Indian Affairs - Division of Education Circular No. I.E. Ay of 1974.
5. Department of Indian Affairs - Division of Education Circular No. I.E. 28 of 1972 File No. 19/15/6/2.
6. Behr, A.L.: *A Textbook of Educational Method*. J.L. van Schaik Pretoria, p.138.



7. Department of Indian Affairs - Division of Education File No. 19/45/3.
8. Van der Walt, N.: Failure at School, "Part II" *Fiat Lux* Vol. 7, No.10 December 1972. pp.20-22.
9. Wall, W.D., Schonell, F.J. and Olson, W.C.: *Failure in School - An International Study* UNESCO, Hamburg 1962. pp.23-31.
10. Transvaalse Onderwysdepartement - "Druiping in Standard 9." Ten opsigte van alle Provinsiale Hoërskole in Transvaal - Desember 1965 NR. 144. Uitgevoer in die Onderwysburo Oktober 1967. p.8.
11. Department of Indian Affairs - Division of Education File No.
12. Malherbe, E.G.: *Education in South Africa* Vol. II: 1923-75, Juta 460 Cape Town 1977. p.441.
13. Department of Indian Affairs - Division of Education File No. 19/46/4/3.
14. Wall, W.D., Schonell, F.J. and Olson, W.C.: op.cit., p.31.
15. Department of Indian Affairs - Division of Education Circular No. I.E. 32 of 1976 File No. 19/34/1/16.
16. Naguran, C.A.: "Differentiated Education Well on its way" *Fiat Lux* Vol. 10 July 1975. p.19.
17. Province of Natal: *Report of the Provincial Education Committee 1946 (Wilks Report)* p.218.
18. The Natal Mercury : Report 18 January 1972.
19. Behr, A.L. and MacMillan, R.G. op.cit., p.173.
20. Lighton, R.E. cited by Behr, A.L. and MacMillan R.G. *ibid.*, p.177.
21. *Ibid.*, p.173.
22. Brown, M. cited by J.K. Craig: *Internal Assessment in Secondary Schools with Special Reference to Certain Overseas Countries.* Lecture delivered at the National Conference on Evaluation. 5 July 1974 Witwatersrand University. p.21.
23. Malherbe, E.G.: op.cit., p.251.
24. *Ibid.*,
25. *Ibid.*,
26. Van der Walt, N. op. cit., pp.20-22.



#### 4. A STUDY OF FAILURE AT THE STANDARD VIII LEVEL IN A SELECTED GROUP OF INDIAN SECONDARY SCHOOLS IN NATAL.

##### 4.1 THE NATURE OF THE PRESENT STUDY

The present study is primarily a descriptive *ex facto research*<sup>(1)</sup> study. According to Behr,<sup>(2)</sup> descriptive or *ex post facto research* precedes other types of research because before progress can be made in solving certain problems one needs to show what the existing facts and prevailing conditions are.

In any dynamic situation facts concerning existing conditions are only part of the picture. What is of greater importance is the conditions desired. For example, in judging academic performance we need not only information describing academic performance, but we must have standards with which to compare the level of performance.<sup>(3)</sup> Descriptive studies must seek to discover cause and effect relationships, and attempt to give interpretations as well.<sup>(4)</sup>

As an Education Planner in the Division of Education, Department of Indian Affairs, the present researcher is aware of the importance of descriptive studies in educational planning. Descriptive researches are of value to decision-makers and policy-makers when they identify and illuminate emergent problems.<sup>(5)</sup>

Behr<sup>(6)</sup> states that descriptive research can be classified into three main types: (i) surveys (ii) developmental studies, and (iii) case studies.

The present study falls into the first category. The survey is one of the most widely used types of descriptive research in the behavioural

sciences. Its purpose is to obtain information about prevailing conditions on a planned basis. The data may be obtained from a total population or from a representative sample from which certain generalisations may be made. The survey gathers its data from a relatively large number of cases at a particular time, and is concerned not with characteristics of individual cases, but with over-all statistics from which abstractions and conclusions can be drawn. (7)

#### 4.2 PROCEDURE IN THE PRESENT STUDY

The purpose of the present study is to investigate *failure* at the Standard VIII level in a group of selected Indian secondary schools in Natal.

The Standard VIII Academic Course pupils were chosen in particular, because, under the new system of differentiated education, they made up the only group of pupils at the time who had (by the end of 1974) written the internal Standard VIII examinations after having had the benefit of an exploratory year in Standard VII in the previous year. (8)

##### 4.2.1 Sampling

###### (i) The Schools

As at March 1974, there were 51 Indian secondary schools in Natal distributed as follows:

Of the 27 State and State-Aided secondary schools in the Durban and District area, there were 16 schools in the Southern Durban area (Chatsworth - Merebank - Clairwood complex), 4 schools in the Western area of Durban, 6 schools in the Central Durban area and one in the Northern area of Durban.

TABLE 4.1

DISTRIBUTION OF INDIAN SECONDARY SCHOOLS IN NATAL

Area	Type of school	Number
Durban and districts	State school	24
	State-aided schools	3
Pietermaritzburg and districts	State schools	4
Northern Natal	State schools	6
North Coast	State schools	10
South Coast	State schools	4
Total: State schools 48 + 3 State-aided schools =		51

Source: Department of Indian Affairs. Division of Education  
Report of the Director; January 1974- December 1974

Since it was necessary to examine the relationship between *failure* and several variables, it was decided that a large representative sample of schools should be selected in order to produce statistically dependable results.

Therefore sixteen secondary schools were selected to represent a cross-section of the various urban, sub-urban and rural areas of Natal. Table 4.2 shows the distribution of the 16 schools according to the areas. Thirteen of them were mixed schools (boys and girls) while three were single sex schools (two for boys and one for girls). Fourteen of the sample schools were H1 schools which have enrolments of 600+ pupils while two to them, viz. Orient High School and Dundee High School, were H2 schools with enrolments of not more than 600 pupils.

The sixteen sample schools in this study were selected to cover a wide spectrum of the socio-economic stratum of the Indian community in Natal.



TABLE 4.2

DISTRIBUTION OF SAMPLE SCHOOLS USED IN THIS STUDY

School	Area	1974 Std VIII enrolment		
		Boys	Girls	Total
1. Westcliff High school	Southern Durban	81	38	119
2. Southlands High School	" "	70	39	109
3. Glenover High School	" "	72	53	125
4. Merebank High School	" "	62	54	116
5. Sastri College	Central Durban	119	-	119
6. Orient High School	" "	75	-	75
7. Gandhi-Desai High School	" "	83	33	116
8. Durban Indian Girls High	" "	-	159	159
9. Reservoir Hills High	Western Durban	61	44	105
10. M.L. Sultan-Pietermaritzburg High School	Pm. Burg	43	35	78
11. Raisethorpe High School	" "	72	35	107
12. Dundee High School	Northern Natal	44	21	65
13. Tongaat High School	North Coast	65	37	102
14. Stanger High School	North Coast	102	64	166
15. Isipingo High School	South Coast	71	44	115
16. Umzinto High School	" "	72	39	111
Total		1 092	695	1 787

Source: Department of Indian Affairs, Division of Education. Schools' Staff Return Schedules 1974.

The four schools selected from the southern areas of Durban represent a good cross-section of the school population. According to a recent survey by the University of Durban-Westville<sup>(9)</sup>, the population of Chatsworth is drawn from all over the Durban metropolitan area, and thus encompasses a wide range of socio-economic levels.

Sastri College is a well established and renowned high school in the heart of Durban. It is purely a boys' school, while the Durban Indian Girls' High School is purely a girls' school, also situated in the heart of Durban. Both these schools draw their pupils largely from the Durban central area. Pupils attending these two schools come from homes, generally regarded financially as above-average to wealthy.

Gandhi-Desai and Orient Islamic high schools are State-aided high schools, in that the community provided the school sites and built the schools on a Rand for Rand basis. Except for providing equipment, furniture and general maintenance of these schools, the Department of Indian Affairs is responsible for the provision and payment of salaries of teachers, text and reference books and other teaching aids.

Such schools are managed by school grantees elected by the proprietors. Generally the grantees exercise the right to admit pupils to these schools.

In all other respects the State-aided high schools follow the same educational programme as the State high schools and are subject to the overall control of the Department of Indian Affairs.

Gandhi-Desai High School was built by the Gujerati-speaking community. Although in its admission of pupils preference is given to Gujerati-speaking children at this school, the Departmental school-zoning measures ensure the admission of the other language group children as well.

The Orient Islamic High School was built by the Moslem community. This has predominantly Moslem children. Both these schools are situated in the central Durban area and draw the bulk of their school population from the above-average to wealthy homes.

Reservoir Hills High School is situated in the Western area of Durban. Reservoir Hills is generally regarded as an above-average socio-economic residential area.

Isipingo High School is situated south of Durban and the pupils attending this school are regarded as coming from average to above-average socio-

economic homes.

The Raisethorpe High School and the M.L. Sultan Pietermaritzburg High School are situated in Pietermaritzburg. The Raisethorpe High School draws its school population from a wide spectrum of the socio-economic stratum ranging from below average to wealthy homes.

The M.L. Sultan Pietermaritzburg High School was formally controlled by the M.L. Sultan College in Durban. When the M.L. Sultan Technical College assumed the status of a College for Advanced Technical Education in terms of Act No. 12 of 1968, its branch in Pietermaritzburg came under the control of the Department of Indian Affairs. This former technical high school still continues to offer courses with a technical bias. Pupils attending this school also come from homes covering a wide cross-section of the population in Pietermaritzburg.

Dundee High School, Tongaat High School and Umzinto High School are situated in semi-rural areas. Pupils attending these three schools come from the outlying areas as well as from the central business areas in the respective boroughs. Thus, the pupils at these schools represent the rural, semi-rural and semi-urban communities of Natal.

The sixteen schools in the sample are fully representative of all the Indian language groups.

Since the location of the schools used in this study indicates a good geographical coverage of the Indian areas in Natal, the sample schools were considered to be representative of the population under study.

(ii) Pupils in the Sample

Since it was not possible to include the total Standard VIII pupils



in Natal in this study, a representative sample from the sixteen schools listed in Table 4.2 was considered as follows:

All the pupils who were in the Standard VIII Academic Course in 1974 in the sixteen sample schools, formed the cohort of this study. Information regarding the number of pupils who passed and failed the Standard VIII Academic Course examination at the end of 1974 was obtained from personal interviews with the principals of these sixteen schools. Information was also obtained about the number of pupils who, after having passed or failed Standard VIII Academic examination, left school at the end of 1974.

All the pupils who wrote and failed the Standard VIII Academic Course examination in 1974 were classified as the *failure group*. All the pupils who passed the Standard VIII Academic Course examination in 1974 were classified as the *promoted group*.

The following is the break-down of the pupils in the cohort who were in the sample schools in 1974.

TABLE 4.3

BREAKDOWN OF PUPILS IN THE COHORT OF STANDARD VIII IN THE SAMPLE SCHOOLS IN 1974

	Boys	Girls	Total
No. wrote	1 092	695	1 787
No. passed	933	623	1 556
No. failed	159	72	231
No. left school at the end of 1974	30	26	* 56
No. returned to school in 1975	1 063	668	* 1 731
No. in promoted group	918	608	* 1 526
No. in failure group	145	60	* 205

Note: The asterisks refer to the number in the *promoted* and *failure* groups referred to above.

According to Borg<sup>(10)</sup> other things being equal, the larger the sample employed in the research, the smaller will be the standard error and the greater the likelihood of obtaining significant results. In many educational research problems, "it is impossible for the research worker to control some of the important variables that could have an effect on research findings."<sup>(11)</sup> Under these conditions, the research worker can have more confidence in his findings if he employs a large random sample. The large random sample insures to some extent that the uncontrolled variables will themselves be operating randomly for the different groups being studied and therefore will not have a systematic effect upon the results.

In 1974 there were approximately 5 500 pupils in the Standard VIII Academic Course in all the secondary schools in Natal.<sup>(12)</sup> Out of the approximately 5 500 pupils, a random sample of 1787 pupils or 33% was taken for the purpose of this research study. The sample, therefore, can be regarded as representative of the Standard VIII Academic Course pupil population.

#### 4.2.2 Choice of Method for Gathering Information

In this study it was decided to use the questionnaire method to obtain information. According to Behr<sup>(13)</sup> the questionnaire method continues to be, if properly constructed and administered, the best available instrument for obtaining information from widely spread sources.

Two sets of questionnaires were used in this study. One set of questionnaire was used to obtain information direct from pupils, and another set was used to obtain certain information from the pupils'

form masters/mistresses. This questionnaire was also used to verify certain information supplied by the pupils.

#### 4.2.2.1 The teachers' questionnaire

Care was taken to ensure that the questionnaire (see Appendix B) did not present any difficulty to the respondents. Most of the responses were required to be indicated by placing a cross (X) in the appropriate space. Some questions were of the rating type.

In the teachers' questionnaire, questions 1 to 12 were of the *closed type* requiring the respondent to place a cross (X) in the appropriate space. An example of a *closed type* of question in the teachers' questionnaire is given below.

- " 9. Please indicate the number of subjects in which this pupil failed at the end of 1974 (This applies to all pupils whether passed or failed).

0	1	2	3	4	5	6

"

An example of the rating question used in this questionnaire is:

- " 14. Please place a cross (X) in the appropriate space for each of the following personality traits (in respect of the pupil).

Personality traits	Very weak	Weak	Average	Good	Outstanding
1. initiative and zeal					
2. Self-confidence					
3. Perseverance					
4. reliability					
5. social adaptability					

"



The teachers were informed during the interview session that they were to insert one cross and one cross only in each column.

#### 4.2.2.2 Pupils' Questionnaire

Care was taken to ensure that the questionnaire did not present difficulty to the respondents. Most of the questions were of the *closed* form, requiring the respondents to place a cross (X) opposite one of several possible answers. An example of this type of question is given below: (see Appendix C)

"1.(h) What language group do you belong to?"

Tamil	Hindi	Telegu	Gujerati	Urdu	Other

A few attitude-scale type of questions were also included in the pupils' questionnaire. An example of this type of question is given below:

" 20. Do you attend school because:

	Yes	No	Don't know
(a) you like school			
(b) you were forced to attend school			
(c) you have a strong desire to succeed in life			

It was made clear to pupils that one and only one cross was to be inserted in the appropriate column. Each response to this question was considered only when one cross appeared in the nine spaces. If a pupil placed more than one cross, the response to this question

was disregarded. However, it would appear that the respondents followed the instructions well, as there was a negligible number who placed more than one cross.

#### 4.2.3 Distribution of questionnaires

As an Educational Planner responsible for curriculum development in Indian schools, the present researcher was able to get the ready co-operation of the principals and teachers. Personal visits were made to all sixteen schools. During these visits, the nature and purpose of the study and the importance of the study from an educational planning point of view, were explained. The questionnaires were distributed personally during the month of April 1975.

The procedure for administering the questionnaires was fully explained to the principals and the form-masters/mistresses of the respective schools. Trial practices in completing the questionnaire were held during these visits.

Sufficient time (about three weeks) was given to each school to complete the questionnaires to ensure that the pupils belonging to the cohort, and who were absent, were given the opportunity to complete the questionnaires.

In respect of the teachers' questionnaires, it transpired during these visits that some of the form-masters/mistresses in the sample schools either had been promoted or transferred to other schools. In such cases it was decided that the principal of the school appoint a teacher who had had reasonable contact-time with the sample pupils, to fill in the questionnaires.

It was also emphasised that the form-masters/mistresses had to complete questionnaires in respect of *all* the pupils who were in his/her Standard VIII Academic Course group in 1974. This included those who wrote the examination at the end of 1974 and left school.

#### 4.2.4 Replies received

(i) Pupils' questionnaires: A total of 1 731 completed questionnaires were received. With reference to Table 4.3 it will be seen that the total number of the 1974 Standard VIII Academic Course pupils who returned to school in 1975 was 1 731. Therefore the response in this case was 100%.

(ii) Teachers' questionnaires: As shown in Table 4.3, the total number of pupils who wrote the Standard VIII Academic Course examination at the end of 1974 was 1 787. Questionnaires completed by the teachers in respect of the pupils numbered 1 787. This was also a 100% response.

In general, the administration of the questionnaires was considered to be a complete success. This may be attributed, *inter alia*, to the following factors:

- (a) the personal visit by the present researcher and the considerable time spent in discussing with the principals and the teachers all aspects of the questionnaire;
- (b) the simple and straight-forward nature of the questions;
- (c) the fact that the present researcher is an Education Planner ensured ready co-operation from principals, teachers and pupils;





- (d) the importance of the study itself. (After all, *failure* and *success* are matters of interest to all teachers and principals.)

#### 4.2.5 Checking and Verifying

All the questionnaires were received within three weeks after distribution. On receipt of the questionnaires, the pupils' questionnaires and the corresponding teachers' questionnaires were carefully sorted out and mechanically numbered so that a particular pupil's questionnaire had the same serial number as the teacher's questionnaire in respect of that particular pupil. It should be stated here, that in order to preserve anonymity, the pupils were requested not to write their names on the questionnaires. Instead they had to write their admission numbers on their questionnaires. The teacher's questionnaire also carried the respective pupils admission number.

In the teachers' questionnaire, there were several items which were used to verify pupils' responses. For example, the pupils had to indicate on their questionnaires the number of subjects they had failed in the Standard VIII examination. The teachers were also asked to indicate this information on their questionnaires. When this information indicated on the pupil's questionnaire did not tally with the information supplied by the teachers, it was queried and rectified by referring such questionnaires to the schools concerned.

### 4.3. DATA PROCESSING AND STATISTICAL ANALYSIS OF RESULTS

#### 4.3.1 Data processing

Since the sample was very large and the questionnaires were comprehensive, it was decided to observe the following procedure:

(i) Pupils' questionnaires:

There were 1 731 pupils' questionnaires. Each questionnaire contained 7 pages and a total of 60 questions. It was impossible to process the data manually within a reasonable time. It was therefore decided to process the data by computer.

The researcher discussed the whole matter of data processing with the ICL computer firm. Since the questionnaires were not pre-coded, it was decided to give each item a code number. The ICL computer firm supplied the data processing COBOL programme sheet. The numerical codes were transferred mechanically on to the data processing sheets. The coded data were punched from the data sheets to ICL punch cards. The services of an experienced punch card operator was used. The data for each pupil was punched on a separate card. Each card, after it had been punched, was verified by the use of an automatic verifier.

A computer programme was written in the COBOL language to process the data in respect of the *failure* group and the *promoted* group.

The computer programme did not include the working of Chi-square and other statistical techniques used in this study. These were done manually by the use of an electronic calculator.

(ii) The teachers' questionnaires:

Since most of the information obtained from the teachers' questionnaires was used for the purpose of verifying information supplied by the pupils, and in view of the additional costs involved, it was decided to process data from these questionnaires manually. Score-sheets were prepared and the data transferred mechanically on to the score sheets. The electronic calculator was used to process data.

#### 4.3.2 Methods of Statistically analysing the Results

As stated earlier, the purpose of this research study was to find if there was any causal relationship between *failure* and a number of variables. It was therefore necessary to subject the data obtained from the questionnaires to statistical analysis techniques. In order to test the significance of its relationship with *failure/success* the Chi-square statistical method was used. Details of these variables are listed under 4.4 of this chapter. According to Downie and Heath<sup>(14)</sup> the  $X^2$  technique is used as a test of significance when the data are expressed as discrete frequencies.

The  $X^2$  statistics is known as *nonparametric* or *distribution free* statistics. It is a very useful test of significance because no assumptions are necessary about the shape of the parameter distribution.

The  $X^2$  statistics is a method of determining whether the differences between the theoretical and the observed frequencies in any number of categories can reasonably be attributed to chance variations in sampling.<sup>(15)</sup> The question arises as to whether the differences between the observed and theoretical frequencies are significant. In this content, the null hypothesis is that no differences exist between the observed and theoretical frequencies. If the observed frequencies depart significantly from the theoretical frequencies, this constitutes evidence for the rejection of the theoretical frequencies.<sup>(16)</sup>

In the following example the calculation of the theoretical or expected frequencies and the  $X^2$  is shown. (Question 1(f) pupils' questionnaire.)



We wish to test the hypothesis that academic performance of the Standard VIII pupils (boys) is independent of the religious group which the pupils belong to. The calculations are set out in the table below.

TABLE 4.4

CALCULATION OF  $X^2$  IN A TEST OF INDEPENDENCE (TESTING HYPOTHESIS THAT ACADEMIC PERFORMANCE IS INDEPENDENT OF RELIGIOUS GROUPS).

	Hindu	Islam	Christian	Total
Promoted group	422 a	134 c	50 e	606
Failure group	44 b	5 d	8 f	57
Total	466	139	58	663

$$\text{Chi-square } (X^2) = \sum \left\{ \frac{(A - E)^2}{E} \right\}$$

where A = actual frequencies

E = expected or theoretical frequencies

	A	E	A - E	$(A - E)^2$	$\frac{(A - E)^2}{E}$
a	422	425,9	-3,9	15,2	0,035
b	134	127,0	7,0	49,0	0,385
c	50	53,0	-3,0	9,0	0,169
d	44	40,6	3,4	11,56	0,284
e	5	11,9	-6,9	47,6	4,000
f	8	4,9	3,1	9,1	1,961
				$X^2 =$	6,834

$$df = 2 \quad p < 0,05$$

At the 0,05 level of significance, the null hypothesis that academic performance is independent of religion is rejected. In other words, in this example religion has an influence on academic performance.

In dealing with the attitude-type of responses the weighted mean method was used in this study. The over-all attitude of the form-masters/mistresses to a particular statement is measured by a score which is the mean of the sum of the weights given by the respondents. To obtain the mean the number of responses in each category was multiplied by the appropriate numerical weighting; the products were added and the sum divided by the total number who replied to that item.

An example is given below of one such calculation (question 13.1 - Teachers' questionnaire.)

TABLE 4.5

TEACHERS' RESPONSES TO PUPILS' BEHAVIOUR

14.1 Nervousness	Certainly Applies	Applies Somewhat	Doesn't Apply	Total
Numerical Weighting	(1)	(2)	(3)	
No. of responses	37	243	653	933

Calculation of the  $(\bar{X}) = 37 \times 1 + 243 \times 2 + 653 \times 3$

Mean  $(\bar{X}) = \frac{\text{Sum of products}}{\text{Number of Respondents}}$

$$37 + 486 + 1959 = \frac{2482}{933} = 2,7$$

In the above example the mean  $(\bar{X})$  must range between 1 and 3. The closer  $\bar{X}$  is to 1, the more obligatory the behaviour mentioned in the statement was felt to be. (17)

Since the mean of 2,7 in the above example is not close to 1, i.e. the strongest rating, nervousness, as observed by teachers, was not regarded as having any influence on academic performance.

#### 4.4 THE RESULTS OF THE PRESENT STUDY

As stated earlier, the aim of the present study was to ascertain whether there was any causal relationship between *failure* at the Standard VIII level and the following variables:

1. sex
2. age
3. fathers' occupation
4. parents' level of Western education
5. family income
6. material comforts at home
7. religion
8. language mainly spoken at home
9. birth order and number of siblings
10. intelligence
11. health of pupils
12. study and reading habits
13. extra-curricular activities
14. absenteeism
15. school transfer
16. choice of subjects and courses
17. teachers' assessment of pupils' behaviour and certain personality traits.

To test for significance of the relationship between *failure* and the variables numbered 1 to 15, the Chi-square statistics as described earlier, will be used. The weighted mean ( $\bar{X}$ ) also described in the previous pages, will be used to assess the teachers' responses to the attitude-type variables, (item 17 above).



The results in respect of the above variables will be set out and discussed in the following pages.

#### 4.4.1 Sex of the pupils and Academic performance

Does the incidence of *failure* occur more amongst boys than girls? According to a UNESCO report on *failure*<sup>(18)</sup> data from the various studies do not agree as to whether *failure* is more marked amongst boys than girls. However, a study, carried out in 1953 by the Royal Board of Education in Swedish secondary schools, shows a different picture.<sup>(19)</sup> The study found that the overall percentage of *failure* was much higher among boys than girls. Van der Walt<sup>(20)</sup> found in 1962 that the *failure* rate amongst girls in all standards was lower than the boys.

In the present study the position was as follows:

TABLE 4.6  
ACADEMIC PERFORMANCE ACCORDING TO SEX OF PUPILS

	BOYS	GIRLS	TOTAL
Promoted group	918	608	1 526
Failure group	145	60	205
Total	1 063	668	1 731

$$X^2 = 8,49$$

$$df = 1$$

$$p < 0,01$$

The results show that the difference in academic performance between

boys and girls is significant at the 0,01 level. From the above table it will be seen that the rate of *failure* among the girls is less than that of the boys. In the *failure* group 29,2% were girls and 70,8% were boys.

Although there appears to be a significant difference in academic performance between boys and girls with a lower rate of *failure* among the girls, it would be rash to conclude that the girls are superior to boys. It should be pointed out that, although the enrolment of girls in Indian secondary schools is increasing, girls in secondary schools perhaps, still represent a more select group and perform better at school.

#### 4.4.2 Age of pupils and academic performance

The ages of the pupils used in this investigation are set out in the table below: Is there any significant relationship between age and academic performance?

TABLE 4.7  
AGE AND ACADEMIC PERFORMANCE

	13 - 14yrs		15 - 16yrs		16yrs +		Total	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Promoted group	49	44	733	315	136	51	918	410
Failure group	6	3	110	50	29	5	145	58
Total	55	47	843	365	165	56	1063	468

Boys: X = 2,911  
df = 2  
p > 0,05

Girls: X = 2,754  
df = 2  
p > 0,05

There does not seem to be any significant relationship between the ages

of the pupils and *failure* at the 0,05 level of significance. However, over 80% of the pupils in this study were of normal age for Standard VIII (15 - 16yrs) only about 12% of the sample pupils were above this age range.

#### 4.4.3 Academic Performance and Certain Aspects of Socio-Economic Background.

##### 4.4.3.1 Fathers' Occupation

Fathers' occupation is generally used as an indicator of socio-economic background. (21) (22) The following categories of occupation were obtained from the questionnaire:

Factory worker, Clerical worker, Shop assistant, Own Business, Teacher, Lawyer, and Doctor.

In the present study, fathers' occupation will be used as the indicator of socio-economic background.

As there were very few doctors or lawyers indicated as father's occupation in this study, it was decided to include them with teachers and refer to this group as the professional group.

Factory-workers in this study refers to skilled, semi-skilled and unskilled factory hands. Clerical workers include all office workers and persons in a supervisory capacity such as foremen and factory charge-hands.

Shop assistants refer to assistants in wholesale and retail trades. Own business includes people who are self employed. There were many pupils who indicated fathers' occupation as being "other". This group includes bus drivers, pensioners, waiters, Corporation workers, etc.



TABLE 4.8  
ANALYSIS OF FATHERS' OCCUPATION

	Failure group				Promoted group				Total
	Boys	%	Girls	%	Boys	%	Girls	%	
Factory-worker	54	15	18	5	204	57	85	23	361
Clerical worker	25	11	12	5	114	49	80	35	231
Shop-assistant	9	8	3	3	73	66	25	23	110
Own Business	27	7	11	3	200	52	157	38	395
Professional	4	3	3	2	61	50	55	45	123
Other (waiter etc.)	26	5	13	3	251	51	200	41	490
Total	145	-	60	-	903	-	602	-	1 710

For the purpose of this study, grouping was done according to a status classification by Glass<sup>(23)</sup> modified for use by the Institute for Social Research, University of Natal. The various categories of occupation according to the status classification are set out below:

CLASSIFICATION OF OCCUPATION

Group	Nature of occupation
I	Manual unskilled
II	Manual semi-skilled
III	Routine grades of Non-manual and Skilled manual
IV	Inspectional Supervising and other non-manual. (lower grade)
V	Inspectional supervising and other non-manual. (higher grade)
VI	Managerial and executive (with some responsibility for initiating policy.)
VII	Professionally qualified and high Administrative.

Although the occupational classification obtained from the questionnaires in the present study could not be neatly classified into the categories stated above, the researcher was convinced that accuracy was not being sacrificed if the following classification was adopted:

<u>Low Status</u>	<u>High Status</u>
Factory worker	Own Business
Clerical worker	Professional (teachers, doctors, lawyers)
Shop assistant	
Other (bus drivers, waiters, pensioners etc.)	

TABLE 4.9  
SOCIO-ECONOMIC STATUS AND ACADEMIC PERFORMANCE

	High				Low				Total
	Boys	%	Girls	%	Boys	%	Girls	%	
Promoted group	261	17	212	14	642	43	390	26	1 505
Failure group	31	15	14	7	114	56	46	22	205
Total	292		226		756		436		1 710

Boys:  $X^2 = 3,52$

df = 1

p > 0,05

Girls:  $X^2 = 3,43$

df = 1

p > 0,05

The difference in academic performance between the pupils in the low socio-economic status group and the high socio-economic status group is not significant at the 0,05 level of significance. However, it was found that there was a higher percentage of passes in the low socio-economic status group (68,5%) than in the high status group (31,5%). In accepting the null hypothesis that fathers' occupation does not influence academic performance ( $p > 0,05$ ) it must be pointed out that by grouping the various occupations indicated by the pupils into two categories, i.e. high status and low status, the relationship between fathers' occupation and academic performance could be masked. Perhaps a broader occupational category classification could have produced different results.

The findings in this study do not support the generally held view that fathers' occupation is related to school achievement. For example Banks and Finlayson<sup>(24)</sup> cite several other studies to show a very consistent relationship between fathers' occupation and performance. In their inter-disciplinary study on success and failure in the secondary school, Banks and Finlayson also found that fathers' occupation relates to academic performance. This relationship has been shown to persist when measured ability has been controlled.

It should be pointed out that in the studies cited above, fathers' occupation was shown as an indicator of social class. In western societies, especially in England, class system still persists. Belonging to a particular social class may have certain inspiring influences. A pupil in the upper and uppermiddle class may be subjected to greater pressure for educational success.



A number of theorists have discussed the influence of family's social class position on the child's value structure and academic performance. Despite the different emphasis placed on the causal role of class position in each of these theories they concur in the notion that achievement levels will be partially a function of the child's class position. Increased environmental stimulation, possible in a wealthier position, should provide the child with an advantage as well as a value structure conducive to a high achievement performance. Although value structure and material advantage are not mutually exclusive factors contributing to differential achievement performance, they both can be seen as possible influences on performance. (25)

In the Indian community, social class as such is not so marked as in the western society.

Although occupation plays an important role in studies of social class and academic performance, fathers' occupation alone does not appear to have much influence on the pupils' academic performance as shown in the present study. There are other variables such as material circumstances of the family, family income and the level of the parent's western education which may collectively play an important role in academic performance.

#### 4.4.3.2 Parent's Western level of education

Like occupation, level of parental education is used as a convenient index of socio-economic status. (26) In this study it was found that fathers' educational level did not have much influence on the academic performance of the boys ( $p > 0.05$ ) but it did have an influence on the girls ( $p < 0,01$ ).

Girls, whose fathers' educational level was higher did better in the examination than girls whose fathers had a lower level of education.

(See Table 4.10)

On the other hand the level of mothers' western education seems to have a positive relationship on academic performance. ( $p < 0,05$  : boys  $< 0,01$  girls). Boys and girls with mothers who had a higher level of western education did better than boys and girls whose mothers had a lower level of education. It is not clear as to why the fathers' level of western education did not have any beneficial influence on the boys.

According to Banks and Finlayson<sup>(27)</sup> "a direct link is feasible between the intellectual level of the parents and the "educability" of the home, which can express itself in such practical ways as helping with homework as well as shared tasks of an "intellectual" kind."

The indirect effects of educational background are also likely to be pervasive since the level of education can manifest itself throughout the whole style or way of life.

The positive relationship between mothers' level of western education and pupils' academic performance, perhaps can be traced to the nature of the interaction between mother and child in the early years of life. During this period, language is being acquired. The importance of language in education is self-evident. It is the instrument with which thinking is conducted, so that impoverished linguistic ability is associated with limited cognitive power. Abstract thought and the ability to reason, upon which academic education is based, are almost wholly determined by the possession of and the ability to use language.<sup>(28)</sup>

TABLE 4.10

THE RELATIONSHIP BETWEEN PUPIL PERFORMANCE AND PARENTS' LEVEL OF WESTERN EDUCATION

	FATHERS' EDUCATION								MOTHERS' EDUCATION							
	No education		Cl (i) - Std ii		Std iii- Std VI		Std VII- Std X		No education		Cl (i)- Std ii		Std iii- Std VI		Std VII Std X	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Promoted group	56	15	113	31	444	265	304	297	237	100	173	70	367	302	136	136
Failure group	13	7	16	4	77	28	39	21	34	16	42	14	54	23	14	6
Total	69	22	129	35	521	293	343	318	271	116	215	84	421	325	150	142

$\chi^2$  Boys = 3,834  
 Girls = 16,648  
 df = 3  
 boys  $p > 0,05$   
 Girls  $p < 0,01$

$\chi^2$  Boys = 9,291  
 Girls = 14,917  
 df = 3  
 boys  $p < 0,05$   
 Girls  $p < 0.01$



Therefore the mother's level of education appears to have an influence on the child's learning ability. It follows therefore that the educational level of the parents may be a decisive influence in all the differences in parental values and parental behaviour.

In a study by Dorothea Behr, <sup>(29)</sup> of first-year Indian students at the University of Durban-Westville, it was found that the educational level of the mothers and fathers of the female students was higher than that of the parents of the male students. The explanation she gives is that the parents who have themselves benefited from education, recognise the importance of providing opportunities for higher education for girls.

#### 4.4.3.3 Family Income

The monthly family income of the pupils is set out below:

TABLE 4.11  
MONTHLY INCOME AND ACADEMIC PERFORMANCE

	Under R100		R101-R300		R301 +		Total
	Boys	Girls	Boys	Girls	Boys	Girls	
Promoted group	118	62	560	343	237	202	1 522
Failure group	35	8	87	40	23	12	205
	153	70	647	383	260	214	1 727

$$\begin{aligned} \text{Boys } X^2 &= 16,167 \\ \text{df} &= 2 \\ p &< 0,001 \end{aligned}$$

$$\begin{aligned} \text{Girls } X^2 &= 4,487 \\ \text{df} &= 2 \\ p &> 0,05 \end{aligned}$$

In the case of the boys, the difference between academic performance and income is highly significant ( $p < 0,001$ ). However, in the case of the girls, the level of family income seems to have no influence on academic performance. ( $p > 0,05$ ) It was found that in the *failure group* 17,0% boys and 3,9% girls were in the under R100 per month category, 42,4% boys and 19,5% girls in the R101 - R300 per month

income category and 12% boys and 5,8% girls in the R301 plus per month income category. Among the *promoted* girls, 4% belonged to the under R100 per month category and 22,5% in the R101 - R300 per month category and 13% in the R301 plus per month income category.

It would seem that the girls belonging to the *promoted group* and *failure group* are more or less evenly distributed in the various income categories, hence there does not seem to be any significant relationship between the level of income and academic performance among the girls. However, the findings presented here should be treated with some caution, as reticence concerning family income was experienced among the sampled population. Although very few respondents made any objections to giving this information, the researcher had no means of checking its accuracy.

#### 4.4.3.4 Material comforts at home

To see whether there was any relationship between academic performance and the possession of own room the hypothesis that passing or failing was independent of having one's own room was tested.

In the table below, details about pupils who had their own rooms and those who shared rooms, are set out.

The results show that there is no significant difference between pupils who had their own rooms and pupils who shared rooms and academic performance. ( $p > 0,05$ ) However, it was found that among the *promoted group* 19% boys and 17% girls had their own rooms, whereas among the *failure group* only 2% boys and 1% girls had their own rooms. This suggests that where pupils have their own rooms, they tend to do better than pupils who have to share a room. Children

who have to share a room may not have the privacy for undisturbed homework, etc.

TABLE 4.12

PUPILS WITH OWN ROOMS AND PUPILS WHO SHARED ROOMS AND ACADEMIC PERFORMANCE

	Own Room		Shared Room		Total
	Boys	Girls	Boys	Girls	
Promoted group	332	228	586	380	1 526
Failure group	43	19	102	41	205
Total	375	247	688	421	1 731

$$\begin{aligned} \text{Boys: } X^2 &= 2,16 \\ \text{df} &= 1 \\ p &> 0,05 \end{aligned}$$

$$\begin{aligned} \text{Girls: } X^2 &= 0,830 \\ \text{df} &= 1 \\ p &> 0,05 \end{aligned}$$

In respect of the other material comforts such as having electricity at home and the possession of chairs and tables, it was found that over 94% of both the *promoted group* and *failure group* had electricity at home and possessed tables and chairs. Therefore it was decided not to test these items for significance.

#### 4.4.4 Religion and Academic performance

The hypothesis that academic performance is independent of religion was tested for significance. The results are set out below. The results in Table 4.13 show that there is a significant relationship between academic performance and religious background at the 0,05 level. However, at the 0,01 level it was found that there is no relationship between the religious background and academic performance.



TABLE 4.13

THE NUMBER OF BOYS AND GIRLS WHO PASSED OR FAILED THE  
1974 STANDARD VIII EXAMINATION ACCORDING TO RELIGION

	Hindu		Islam		Christian		Total
	Boys	Girls	Boys	Girls	Boys	Girls	
Promoted group	631	422	201	134	83	50	1 521
Failure group	107	44	19	5	18	8	201
Total	738	466	220	139	101	58	1 722

$$\begin{aligned} \text{Boys: } X^2 &= 6,6 \\ \text{df} &= 2 \\ p &< 0,05 \end{aligned}$$

$$\begin{aligned} \text{Girls: } X^2 &= 6,7 \\ \text{df} &= 2 \\ p &< 0,05 \end{aligned}$$

In the *failure group* there were 75,2% Hindus, 12,9% Christians and 11,9% Islamics. It was found that the *failure* rate was lowest (2,4%) among the Islamic girls.

However, it would be wise to consider the results very cautiously. It would seem that religion *per se* is not the important factor influencing academic performance, but the value structure associated with religion or the motivation instilled in the child which could account for the differences in academic performance.

Moreover, it should be pointed out that pupils of the Islamic faith generally belong to the more affluent group in the Indian community and this could have an influence on the academic performance of the Islamic pupils.

#### 4.4.5 Birth order, Siblings and Academic performance

Numerous studies (30, 31, 32, 33) have shown that there is a relation-

ship between academic performance and birth order. For example Chopra<sup>(34)</sup> found among the Indian children he studied, that although the ordinal position among siblings did not have any consistent relationship with academic performance, one interesting trend noted was that the third-born child ranked first in academic achievement and the sixth or later born were found to be inferior to all other groups.

In another study by Wells,<sup>(23)</sup> it was found that the first-born children generally do better in school than other children. The reason he suggests for this, is that first-born children are at an advantage in that their mothers have more time to devote to shared activities. Hodges and Balow<sup>(35)</sup> found, on the other hand, that it was doubtful that ordinal position is related to academic performance.

In the present study the null hypothesis that birth order has no influence on academic performance was tested. The results are set out below:

TABLE 4.14  
BIRTH ORDER AND ACADEMIC PERFORMANCE

	First born		Inter- mediate born		Last born		Total
	Boys	Girls	Boys	Girls	Boys	Girls	
Promoted group	237	159	474	311	205	137	1 523
Failure group	52	19	69	26	22	13	201
	289	178	543	337	227	150	1 724

Boys  $X^2 = 8,092$   
 $df = 2$   
 $p < 0,05$

Girls  $X^2 = 2,426$   
 $df = 2$   
 $p > 0.05$

In the case of the boys there is a significant relationship between academic performance and birth order at the 0,05 level of significance. On the other hand, there seems to be no significant relationship between birth-order and academic performance among the girls at the 0,05 level of significance. The *failure* rate is lower among the first-born boys than in the intermediate-born boys. For example 25% of the first-born boys failed as against 34% of the intermediate-born boys. This suggests that among Indian parents, the expectation for the first-born is greater than those for the intermediate and last-born. The first-born boys perhaps work harder to please their parents.

Betty Miner<sup>(36)</sup> found in her study that birth order and family size are related to the achievement variables with the exception of intelligence variables. Neither socio-economic status nor intelligence appeared to have direct influence on these relationship. First-born children and children in small families tend to achieve at a higher level than later born children in large families.

It is possible that priority of birth is an advantage in gaining material preferences. It is also possible that parental expectations for the first-born are greater than the intermediate and last born-children. Sampson<sup>(37)</sup> found that first-born children have a higher need for achievement.

#### 4.4.5.1 Number of Siblings and Academic performance

Although there is no general agreement that birth order is related to academic performance, there are some suggestions that birth order is unrelated to academic performance in families where there are three or more siblings, but it plays a part in families with two



children. (38)

In the present study the results as set out in Table 4.15 show that the pupils' academic performance is unaffected by the number of siblings in the family. The null hypothesis that academic performance is independent of the number of siblings in the family was accepted at the 0,05 level of significance.

According to a Scottish study<sup>(39)</sup> it was found that after allowing for environmental differences among families of differing sizes, children from large families did not generally score as highly in tests of ability as children from small families. On the other hand Stice et al.<sup>(40)</sup> found no relationship between family size and academic performance.

Although the number of siblings in the family may be a variable affecting the academic level of the pupil, the operation of this variable, however, may have contradictory effects. Large family size means a reduction in the available contact with parents, but increased interpersonal contacts for the pupil with other siblings.

#### 4.4.6 Language mainly spoken at home and Academic performance

Is there any significant difference in the scholastic performance between pupils who speak only English at home and those who speak one of the vernacular languages at home? In Table 4.16 the breakdown of the sample pupils who either spoke English and/or one of the vernacular languages is set out.

The results show that there is no significant difference in academic performance between those pupils who generally speak English at home

TABLE 4.15

NUMBER OF BROTHERS AND SISTERS AND ACADEMIC PERFORMANCE

	NUMBER OF BROTHERS								NUMBER OF SISTERS							
	1 - 2		3 - 4		5 - 6		7 - 8		1 - 2		3 - 4		5 - 6		7 - 8	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Promoted group	508	380	225	125	37	22	5	2	562	364	163	97	10	13	2	3
Failure group	82	37	41	15	8	2	1	0	91	37	36	15	1	3	1	0
Total	590	417	266	140	45	24	6	2	653	401	199	112	11	16	3	3

Boys:  $X^2 = 0,758$   
 df = 3  
 p > 0,05  
 Girls:  $X^2 = 0,654$   
 df = 3  
 p > 0,05

Boys:  $X^2 = 3,146$   
 df = 3  
 p > 0,05  
 Girls:  $X^2 = 3,241$   
 df = 3  
 p > 0,05

and those who generally speak one of the vernacular languages. ( $p > 0,05$ )

The question required the pupils to indicate the language *mainly* spoken at home. At the time the questionnaires were distributed, it was made clear to the teachers and the principals that the respondents must place only one cross (X) to indicate only the language mainly spoken at home. It is possible that in view of this instruction, pupils who spoke English as well at home, indicated only one of the vernacular languages as the language mainly spoken at home.

In the sample there were 1 444 out of a total of 1 731 (83%) who indicated that they speak English at home. It must be pointed out that, although the remaining pupils (17%) indicated that they generally speak one of the vernacular languages at home, it could safely be assumed that these pupils also speak English at home.

In most Indian homes at the present time, English is more commonly spoken than the vernacular languages. According to Logue<sup>(41)</sup> for most of the Indians, English falls somewhere between a first language and a second language.

The results in Table 4.16 support the suggestion that English is generally spoken in most Indian homes, hence there is no difference between the performance of those who indicated that they speak English at home and those who indicated that they speak one of the vernacular languages at home.

However, no general conclusion could be drawn in view of the fact that the respondents were required to indicate only the language mainly spoken at home. In any case, the frequency with which English is spoken at home was not ascertained.



In retrospect the researcher has come to the conclusion that the item as stated in the questionnaire ought to have been worded differently in order to get more correct information about the extent and frequency of English and Indian languages spoken at home.

TABLE 4.16  
ACADEMIC PERFORMANCE AND LANGUAGE SPOKEN  
AT HOME

	English		Vernacular		Total
	boys	girls	boys	girls	
Promoted group	742	538	176	70	1 526
Failure group	112	52	33	8	205
Total	854	590	209	78	1 731

$$\begin{aligned} \text{Boys: } X^2 &= 1,13 \\ \text{df} &= 1 \\ p &> 0,05 \end{aligned}$$

$$\begin{aligned} \text{Girls: } X^2 &= 0,17 \\ \text{df} &= 1 \\ p &> 0,05 \end{aligned}$$

#### 4.4.7 IQ and Academic performance

Intelligence and school achievement are known to be related.<sup>(42)</sup> In the present study an attempt was made to see if there was any significant relationship between the pupils' IQ and *failure*. The teachers were requested to fill in the IQ scores of pupils on the teachers' questionnaire. In Indian schools the Group Test for Indian South Africans, known as GTISA is used. This test is based on the new South African Test. (NSAGT). The results are set out below. The IQ of 177 pupils in the cohort were not available. These 177 pupils were either not tested for IQ or, on transfer from one school to another, their scores were not indicated on their Cumulative Record Cards.

TABLE 4.17

I.Q. SCORES AND ACADEMIC PERFORMANCE OF BOYS IN THE SAMPLE

	140+	130-139	120-129	110-119	90-109	80-89	70-79	Total
Promoted group	20	51	181	239	216	76	36	819
Percentage	2,4	6,2	22,2	29,3	26,3	9,2	4,4	100%
Failure group	-	1	14	22	44	37	14	132
Percentage		0,75	10,7	17,0	33,4	27,5	10,7	100%

$$X^2 = 65,47$$

$$df = 6$$

$$p < 0,01$$

TABLE 4.18

I.Q. SCORES AND ACADEMIC PERFORMANCE OF GIRLS IN THE SAMPLE

	140+	130-139	120-129	110-119	90-109	80-89	70-79	Total
Promoted group	7	23	93	181	178	90	25	587
Percentage	1,2	3,9	15,6	30,1	29,8	15,0	4,4	100%
Failure group	-	-	3	9	25	19	6	62
Percentage			4,8	14,6	39,8	30,8	10,0	100%

$$X^2 = 26,275$$

$$df = 6$$

$$p < 0,01$$

The results show that in respect of both the boys and the girls there is a very significant relationship between academic performance and IQ at the 0,01 level and even at the more stringent 0,001 level of significance.

The *failure* rate was higher in the lower IQ ranges. For example, in the *failure group* there were 33,4% boys and 39,8% girls with IQ of between 90 - 109. The corresponding percentages for the *promoted group* were 26,3% and 29,8%. In the 80 - 89 IQ range, there were 27,5% and 30,8% boys and girls respectively who failed in the examination, whereas in the *promoted group*, there were only 9,2% boys and 15% girls in this IQ range.

The results show that there were some pupils with high IQ who failed. For example, in the *failure group* there was one boy with an IQ of between 130-139, and 14 boys and 3 girls with IQs of between 120 - 129.

Several studies<sup>(43)</sup> <sup>(44)</sup> <sup>(45)</sup> have shown that in some cases, bright children fail. Ethel Bartlett<sup>(46)</sup> found that in one group of 715 failures at a technical school, 135 pupils had an IQ of between 130-139, and 73 pupils were above 140 IQ with several in the 150s and 160s. All these studies point out that there are factors other than intelligence that could account for bright pupils failing.

However, it must be pointed out that, although there is ample evidence to suggest a positive relationship between academic performance and IQ, there are other variables, notably certain personality traits which have to be taken into account.

#### 4.4.8 General health of the pupil and Academic performance

Has the condition of the health of the pupil any influence on academic performance? To answer this question, the null-hypothesis that the condition of the health of a pupil has no influence on either passing or failing was tested. The results are set out below.



TABLE 4.19

GENERAL HEALTH CONDITION OF THE RESPONDENTS AND ACADEMIC PERFORMANCE

	Good		Average		Poor		Total
	Boys	Girls	Boys	Girls	Boys	Girls	
Promoted group	564	333	339	264	14	10	1 524
Failure group	75	36	65	22	4	1	203
Total	639	369	404	286	18	11	1 727

$$\text{Boys: } X^2 = 5,168$$

$$\text{df} = 2$$

$$p > 0,05$$

$$\text{Girls: } X^2 = 0,859$$

$$\text{df} = 2$$

$$p > 0,05$$

It was found that in respect of both the boys and girls, there is no significant relationship between the general health of the pupils and academic performance at the 0,05 level of significance. In the *promoted group*, more than 58% of the pupils indicated their health as being average and only 2% indicated their health as being poor. In the *failure group*, 43% pupils indicated their health as being average and 3% as being poor.

The findings in this study appear to contradict the findings of other studies<sup>(47) (48) (49)</sup>. Van der Walt<sup>(50)</sup> in a study undertaken in 1962 found that the difference in the health condition between his failure group and control group was significant at the 0,01 level. The possible reasons for the differences between the findings of Van der Walt and the present study may be due to the fact that in the present study the responses to the questions on state of health, were the pupils' opinion of the state of their health and not medical opinions. Apart from this, it is possible that the health condition of the pupils in the present study was better than in the study of Van der Walt.

degree of accuracy required in this response. Therefore, the responses could not be regarded as reliable.

#### 4.4.8.1 Physical Handicaps

In the case of physical handicaps of the pupils, the results were as follows.

TABLE 4.20

PHYSICAL HANDICAPS AND ACADEMIC PERFORMANCE

B. = Boys

G. = Girls

	None		Speech		Hearing		Sight		Cripple		Other		Total
	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	
Promoted group	675	480	59	7	14	4	150	110	2	1	17	6	1 525
Failure group	110	50	8	2	9	2	13	5	2	0	3	1	205
Total	785	530	67	9	23	6	163	115	4	1	20	7	1 730

Boys:  $X^2 = 21,895$

df = 5

p < 0,01

Girls:  $X^2 = 9,587$

df = 5

p > 0,05

The findings show that in the case of the boys physical handicaps such as speech defects, poor sight, and hearing defects, have a statistically significant effect on academic performance. ( $p < 0,01$ ) However, in the case of the girls the null hypothesis that academic performance is independent of any physical defects was accepted at the 0,05 level of significance. It was found that about 9% of the *failures* among the boys had sight defects and 6,2% had hearing handicaps and 5,5% of them had some speech defects. Among the girls in the *failure group*, 3,3%



had speech defects, 3,3% hearing handicaps and about 8% had sight defects.

It would appear that the incidence of physical handicaps is less among the girls than the boys in this cohort and this might account for the difference.

#### 4.4.9 Absenteeism and Academic performance

Although poor physical health could contribute to poor attendance at school, it was nevertheless decided to see what effects poor attendance at school had on pupil performance. In the table below, details about the number of days the pupils stayed away from school are set out.

TABLE 4.21

NUMBER OF DAYS PUPILS ABSENT FROM SCHOOL AND ACADEMIC PERFORMANCE

	DAYS								Total
	0 - 9		10 - 19		20 - 29		30+		
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
Promoted group	731	528	136	66	26	9	23	5	1 524
Failure group	89	37	45	16	13	6	9	1	205
Total	820	565	181	82	39	15	32	6	1 729

$$\text{Boys: } X^2 = 49,017$$

$$\text{df} = 3$$

$$p < 0,001$$

$$\text{Girls: } X^2 = 30,36$$

$$\text{df} = 3$$

$$p < 0,001$$

The null hypothesis that academic performance is independent of the number of days the pupil was absent from school was rejected with great confidence, ( $p < 0,001$ ). The difference in academic performance between



the *failure group* and the *promoted group* was highly significant for both the boys and girls. In the *failure group*, 31% of the boys and 26,6% of the girls were absent for periods of between 10 - 19 days. The corresponding percentage for the *promoted group* were 14,8 and 10,8%. In the 20 - 29 days period, there were 8,9% boys and 10% girls belonging to the *failure group* as against 2,8% boys and 1,4% girls in the *promoted group*.

#### 4.4.10 Study and Reading Habits and Academic performance

##### 4.4.10.1 Time spent on doing homework

In the table below details about the number of hours spent on homework are presented:

TABLE 4.22

NUMBER OF HOURS SPENT ON HOMEWORK PER WEEK AND ACADEMIC PERFORMANCE

	under 1 hr		1 - 2hrs		2 - 3 hrs		3 - 4 hrs		Total
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
Promoted group	56	22	374	160	334	260	151	166	1 523
Failure group	8	6	87	26	36	21	14	7	205
Total	64	28	461	186	370	281	165	173	1 728

Boys  $X^2 = 19,26$   
 df = 3  
 p < 0,01

Girls  $X^2 = 16,938$   
 df = 3  
 p < 0,01

The null hypothesis that there is no significant difference in the amount of time spent on homework and academic performance was rejected at the 0,01 level of significance. There were more *failures* among both the boys and the girls who devoted between under 1 hour to 2 hours per week to homework than those who devoted between 3 - 4 hours per week.

Pupils were also asked to indicate whether they did homework only when their teachers set homework. The responses showed that in the *failure group*, 59% (90 boys and 32 girls) of the pupils did homework only when it was set by the teachers. It was generally found that among the promoted group, more pupils did homework regularly whether it was set by the teachers or not.

#### 4.4.10.2 Reading Habits

##### (i) Daily Newspapers

Pupils were asked how often they read daily newspapers. They had to indicate whether they read the newspapers "rarely/never", "sometimes" or "regularly". The details are set out below:

TABLE 4.23

THE REGULARITY IN THE READING OF NEWSPAPERS AND ACADEMIC PERFORMANCE

	Rarely/Never		Sometimes		Regularly		Total
	Boys	Girls	Boys	Girls	Boys	Girls	
Promoted group	15	11	396	303	508	293	1 526
Failure group	4	1	80	37	61	22	205
Total	19	12	476	340	569	315	1 731

Boys:  $X^2 = 9,065$   
 $df = 2$   
 $p < 0,05$

Girls:  $X^2 = 3,085$   
 $df = 2$   
 $p > 0,05$



In the case of the boys there is no significant relationship between academic performance and the regularity with which newspapers are read. Therefore the null hypothesis was rejected at the 0,05 level.

In the case of the girls, however, the null hypothesis was accepted at the same level of significance. The results suggest that among the boys who passed, the regular reading of the daily newspapers seems to have a beneficial influence on their academic performance.

It is generally believed that in Indian homes, boys read the newspapers more regularly than girls. Perhaps, the girls do not find the time to devote to daily newspapers because they are often called upon to assist with household chores.

(ii) Magazines and Periodicals

Pupils were asked to indicate the regularity with which magazines and periodicals were read by them. The results are set out below.

TABLE 4.24

REGULARITY IN THE READING OF MAGAZINES AND PERIODICALS AND ACADEMIC PERFORMANCE

	Rarely		Sometimes		Regularly		Total
	Boys	Girls	Boys	Girls	Boys	Girls	
Promoted group	57	18	612	347	249	243	1 526
Failure group	14	4	109	36	22	20	205
Total	71	22	721	383	271	263	1 731

$$\begin{aligned} \text{Boys: } X^2 &= 10,59 \\ \text{df} &= 2 \\ p &< 0,01 \end{aligned}$$

$$\begin{aligned} \text{Girls: } X^2 &= 2,974 \\ \text{df} &= 2 \\ p &> 0,05 \end{aligned}$$



It was found that, as in the case of newspapers, boys who passed read magazines and periodicals more regularly than boys who failed. This was significant at the 0,01 level. On the other hand, there was no significant relationship at the 0,05 level between the regularity with which magazines and periodicals were read and academic performance among the girls.

(iii) Use of the library for borrowing books

Information about the use of library borrowing facilities was also obtained. The following are the details about how often the pupils in the sample used the library for borrowing books.

TABLE 4.25  
THE USE OF THE LIBRARY FOR BORROWING BOOKS  
AND ACADEMIC PERFORMANCE

	Rarely/Never    Sometimes    Regularly						Total
	Boys	Girls	Boys	Girls	Boys	Girls	
Promoted group	130	37	459	200	325	370	1 521
Failure group	16	6	79	27	50	27	205
Total	146	43	538	227	375	397	1 726

Boys  $\chi^2 = 1,363$   
df = 2  
p > 0,05

Girls:  $\chi^2 = 5,845$   
df = 2  
p > 0,05

In the case of both the boys and the girls there is no significant relationship between academic performance and the use of the library for borrowing books, ( $p > 0,05$ ). It would seem that the pupils in the sample paid more attention to the formal study of set books which

were prescribed for the examination, than to books borrowed for leisure reading. Perhaps the pupils feel that reading books apart from their prescribed books, does not have any beneficial effect on their performance in the examination.

In a study by De Wet<sup>(51)</sup> carried out among Indian students enrolled at the University of South Africa in 1965, on their leisure time reading habits, it was found that formal studies held a predominant position, averaging 9,4 hours per week, followed by newspaper reading, book reading and reading of periodicals, in decreasing order. The average time spent in reading newspapers was higher than in the case of any other population group, and also differed from the pattern of White and Coloured respondents who gave precedence to books above newspapers. De Wet also found that students seem mostly to buy their own books for leisure reading, or to borrow books from friends, and only about 16% of the respondents may be said to be intensive public library users.<sup>(52)</sup>

#### 4.4.11 Extra-curricular Activities and Academic performance

Pupils were asked to list the number of sporting activities they participated in. It was found that about only 1% of the *failure group* did not participate in any sporting activities. Therefore it was decided not to test the null hypothesis in this case. It was, however, decided to test the null hypothesis that the amount of time a pupil spent in sporting activities had no adverse effect on his academic performance.

The details are set out below.



TABLE 4.26

THE RELATIONSHIP BETWEEN THE NUMBER OF HOURS SPENT ON SPORTING  
ACTIVITIES AND ACADEMIC PERFORMANCE

	B. = Boys				G. = Girls							
	None		Under 1hr		2-3hrs		4-5hrs		6-7hrs		8-10hrs	
	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.
Promoted group	39	103	138	212	332	209	210	60	102	14	97	9
Failure group	9	10	20	28	72	16	27	4	7	1	4	1
Total	48	113	158	240	404	225	237	64	109	15	101	10

Boys  $X^2 = 21,619$   
 df = 5  
 p < 0,01

Girls  $X^2 = 3,769$   
 df = 5  
 p > 0,05

There is a significant relationship between academic performance and the time spent on extra-mural activities among boys. (p < 0,01).

No such relationship was found among girls (p > 0,05). Here again, Indian girls generally tend to spend less time on extra-mural activities than boys. Outdoor games for girls are severely restricted and such activities are usually indulged in during school time.

Boys on the other hand have a wide variety of outdoor games in which they participate after school hours .

The findings show that among the *promoted group* more boys spend about 2 - 3 hours per week on extra-mural activities than the *promoted group* girls. The results suggest that generally the *promoted boys* spend more time on extra-mural activities. The extent to which participation in extra-mural activities *per se* affects academic per-



Harris<sup>(54)</sup> reviewed many studies and found that there is no relationship, though some studies report to the contrary. For example, Lucas<sup>(55)</sup> found that unsuccessful students participated less in social activities than successful students. What most of these studies suggest, is that the way in which participation in non-academic affairs affects academic performance, depends a great deal on several other factors. It depends first on how far pupils can balance their time carefully between the two.

#### 4.4.12 School transfer and Academic performance

It is generally believed that when a pupil is transferred from one school to another, it disrupts the pupils' learning situation. The pupil attending a new school has to adapt himself to new teachers, new methods of teaching, new social environment and new friends.<sup>(56)</sup>

In the present study it was decided to test the null hypothesis that the differences in academic performance between the *failure group* and the *promoted group* were not influenced by the number of times the pupils were transferred from one school to another.

The results are set out below.

TABLE 4.27

NUMBER OF TIMES THE PUPILS TRANSFERRED FROM ONE SCHOOL TO ANOTHER AND ACADEMIC PERFORMANCE Class(i) - Std. VI

B. = boys G. = girls

	No. of times transferred										Total
	None		1		2		3		4		
	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	
Promoted group	273	187	328	231	161	86	97	73	58	29	1 523
Failure group	48	15	43	19	36	15	15	8	3	3	205
Total	321	202	371	250	197	101	112	81	61	32	1 728

Boys:  $X^2 = 9,322$   
 $df = 4$   
 $p > 0,05$

Girls:  $X^2 = 5,535$   
 $df = 4$   
 $p > 0,05$

TABLE 4.28

NUMBER OF TIMES THE PUPILS WERE TRANSFERRED FROM ONE  
SCHOOL TO ANOTHER AND ACADEMIC PERFORMANCE  
STD. VII - VIII

	No. of times transferred									
	None		1		2		3		Total	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Promoted group	598	355	281	237	25	12	4	-	1 512	
Failure group	96	35	38	23	9	2	-	-	203	
Total	694	390	319	260	34	14	4	-	1 715	

$$\text{Boys } \chi^2 = 6,253$$

$$\text{df} = 3$$

$$p > 0,05$$

$$\text{Girls } \chi^2 = 0,480$$

$$\text{df} = 2$$

$$p > 0,05$$

The null hypothesis was accepted at the 0,05 level of significance. There is no significant relationship between academic performance and the number of times the pupils were transferred from one school to another. However, the results show that:

There were more transfers in the primary school than in the secondary schools;

The frequency of transfers in the primary school stage was greater among the boys than among girls. For example, 20,6% boys and 12,3% girls in the *promoted group* were transferred on two or more occasions as against 26,3% boys and 12,6% girls in the *failure group*;

In secondary schools, the incidence of transfers was negligible. Only 1,9% boys and 0,79% girls in the *promoted group* were trans-

ferred on two or three occasions. In the *failure group*, 4,4% boys and 0,98% girls were transferred on two occasions.

The results in this study appear to contradict other research findings. In several other studies (57)(58)(59) it was found that the more frequent a pupil is transferred from one school to another, the greater is the incidence of *failure*.

The possible reasons for the difference in the findings between this study and other studies could be:

That the information supplied by the pupils about the number of times they were transferred from one school to another could have been unreliable. It is doubtful that all the pupils could remember correctly the number of times they were transferred;

That in Indian schools the Departmental school zoning measures cause block transfers whereby entire class units are transferred from one school to another. In some cases even the teachers are transferred with the pupils. In this way the pupils do not find themselves alone in a strange environment. (60);

That the incidence of transfer from one province to another province is very rare in Indian schools.

It is often difficult to know how many children who stay away from school are really ill, how many are kept at home by their parents and how many are truants. According to Tyreman (61) it would seem that, roughly speaking about 85% of absence is due to illness, about 15% to parents keeping their children at home and 0,74% due to truancy. The present researcher carried out an investigation into



absenteeism and truancy in Indian school in 1975 for the Division of Education, Department of Indian Affairs.<sup>(62)</sup> It was found that truancy and absenteeism in Indian schools were negligible. However, in certain areas like Chatsworth, truancy was caused by socio-economic factors. Working mothers generally cause their daughters to stay at home and look after sick sisters or brothers.

It was also found that mobile grocery and vegetable vendors employ school boys to act as delivery boys and assistants in their mobile business in return for pocket money.

#### 4.4.13 Choice of Courses and failure

From the results obtained, it was found that the pupils in both the *failure* and the *promoted* groups had indicated that in the choice of a field of study, they were also guided by the wishes of their parents as well as by the guidance given to them by their schools. Therefore it was decided not to test for significance. However, it was found that 62% of the boys and 69% of the girls in the promoted group exercised their own choice in the selection of a field of study. In the *failure group* the corresponding percentages were 58,7% and 56,9%. Only 10% of the boys and 13% of the girls who had failed indicated that they were forced to take the courses against their choice. The rest of the pupils had indicated that they were guided by their parents and teachers in the choice of subjects and also the grade in which to take the subjects

#### Subject failure

In Tables 4.29 and 4.30 the results in individual subjects taken by the pupils on either the Higher Grade or the Standard Grade are presented. It will be seen that a comparatively higher percentage of pupils who took mathematics and biology on the Higher Grade failed

than in any other subject. Of the pupils who took mathematics on the Higher Grade 17,8% failed the subject while 4,2% of the pupils failed mathematics on the Higher Grade, but their results were converted to a pass on the Standard Grade. In biology 6% of the pupils failed on the Higher Grade, and 3% failed on the Higher Grade, but their results were converted to a pass on the Standard Grade.

On the other hand the results in the subjects taken on the Standard Grade show a higher percentage of pupils failing in the subjects than in the corresponding subjects taken on the Higher Grade. The highest percentage of *failures* was in mathematics (42%), economics (40%), home economics (40%) and in biology (22%).

It was also found that in the *failure group* about 30% failed in one subject (plus the aggregate), 44% failed in two subjects and 25% failed in three or more subjects. In the *promoted group* 25,6% failed in one subject only. (If pupils fail in more than one subject, they fail the whole examination).

It would appear that the percentage of pupils failing in subjects taken on the Standard Grade is much higher than in the subjects taken on the Higher Grade. The possible reason perhaps is that pupils taking a subject on the Higher Grade have two chances of passing. If they fail to pass on the Higher Grade, their *failure* on the Higher Grade is converted (subject to certain minimum marks requirements) to a pass on the Standard Grade. This is not possible when a subject is taken on the Standard Grade. A pupil either fails or passes in this grade. It is also possible that the difference in standard between the Higher grade and the Standard grade examination papers does not differentiate adequately.

TABLE 4.29

RESULTS OF THE SUBJECTS TAKEN ON THE HIGHER GRADE, BY THE STD VIII SAMPLE PUPILS IN 1974

	No. entered	No. passed	%	No. convert- ed to Std. Grade	%	No. failed	%
English	1 730	1 672	97	8	0,47	50	2,53
Afrikaans	89	88	99	-	-	-	-
Biology	1 470	1 345	91	38	3,0	87	6,0
Physical Science	429	416	97	2	0,47	11	2,53
Mathematics	1 305	1 023	78	56	4,2	226	17,8
History	672	631	94	15	2,2	26	3,8
Geography	472	440	93	8	1,7	24	5,3
Accountancy	858	829	97	6	0,70	23	2,30
Economics	110	105	95	-	-	5	5,0



TABLE 4.30

RESULTS OF THE SUBJECTS TAKEN ON THE STANDARD GRADE BY  
THE STD VIII SAMPLE PUPILS IN 1974

	No. entered	No. passed	%	No. failed	%
English	1	1	100	-	-
Afrikaans	1 637	1 531	94	106	6
Biology	23	18	78	5	22
Physical Science	32	31	94	1	6
Mathematics	81	47	58	34	42
History	6	6	100	-	-
Geography	45	44	98	1	2
Accountancy	590	537	91	53	9
Economics	10	6	60	4	40
Business Economics	210	205	97	5	3
Typing	341	311	91	30	9
Home Economics	15	9	60	6	40
Housecraft	40	40	100	-	-

#### 4.4.14 Teachers' assessment of Pupils' Behaviour Problems

It was stated earlier that there are numerous studies showing that factors other than ability influence academic performance. Miller<sup>(63)</sup> cites several studies to illustrate that such behaviour problems as lack of interest, lack of perseverance, nervousness and social inadaptability adversely affect academic performance.

In the present study, the following behaviour problems were considered in respect of academic performance: nervousness, withdrawn, restlessness/inattentive, lack of concentration and co-operativeness.

Teachers were asked to rate the above behaviour problems in respect of the pupils on a three-point scale as follows: "certainly applies", "applies somewhat", and "doesn't apply".

Each item was given a weighting as follows: "certainly applies" (1), "applies somewhat" (2) and "doesn't apply" (3).

The overall response of the teachers to a particular item was measured by a score which is the mean of the sum of the weights given to an item. The calculation of the weighted mean was shown earlier in this chapter. The results are shown in the table below:

TABLE 4.31  
WEIGHTED MEAN

Behaviour problem	Promoted Group		Failure Group	
	Boys	Girls	Boys	Girls
Nervousness	2,7	2,6	2,7	2,6
Withdrawn	2,6	2,6	2,5	2,4
Restlessness	2,6	2,7	2,4	2,5
Lack of concentration	2,6	2,6	1,9	1,7
Cooperativeness	2,3	1,5	2,1	1,9

From the above table it can be seen that the behaviour problems as described by the teachers, did not differ materially in the *promoted group* and the *failure group* or between boys and girls.

In respect of the following behaviour problems, teachers' observations were rated as average: nervousness, withdrawn and restlessness. In the case of "lack of concentration", teachers' ratings were average for boys and girls in the *promoted group* but it was rated poorly in respect of boys and girls in the *failure group*. The weighted mean was 1,9 and 1.7 for the boys and girls respectively.

When it came to "co-operativeness", only the boys in the *promoted group* and the *failure group* were rated as average, but the girls in both the groups were rated as being highly in "co-operativeness". The weighted mean was 1,5 in the *promoted group* and 1,9 in the *failure group*.

#### 4.4.15 Personality Traits and Academic Performance

The fact that individual differences in intelligence cannot account for all or even the major part of the differences in scholastic achievement, suggests that personality variables may play a significant role in determining performance in schools.<sup>(64)</sup> Several studies<sup>(65)(66)(67)</sup> show some relationship between academic performance and personality variables. In this study the following personality traits "initiative and zeal, self-confidence, perseverance, reliability and social adaptability were assessed."

Teachers were asked to rate the above traits by placing a cross (X) in the appropriate space. The ratings were on a five-point scale as follows:

very weak(1), weak(2), average(3), good(4), outstanding(5).



The teachers' responses were assessed by the use of the weighted mean method. The results are set out below:

TABLE 4.32  
WEIGHTED MEAN

Personality trait	Promoted group		Failure group	
	Boys	Girls	Boys	Girls
Initiative & zeal	3,2	3,5	2,7	2,6
Self-confidence	3,2	3,5	3,3	3,0
Perseverance	3,1	3,4	2,8	2,4
Reliability	3,4	3,5	3,0	2,9
Social adaptability	3,1	3,5	3,0	3,0

The closer the weighted mean ( $\bar{X}$ ) is to 5, the more the particular personality trait was observed in the pupils. The results in the above table show that:

In respect of the initiative and zeal, the boys and girls in the *promoted group* were rated as being between average and good. This trait was rated as being between weak and average for the boys and girls in the *failure group*;

Perseverance was rated as being average in the *promoted group* but this trait seems to be weaker in the *failure group*;

In respect of self-confidence, social adaptability and reliability, there does not appear to be any material difference between the *promoted group* and the *failure group*, nor was there any great difference between boys and girls in this respect.

In a study cited by Miller<sup>(68)</sup>, headmasters of English grammar schools were asked to give their reasons for pupil inability to succeed in university studies. Among the reasons, the following were included:

Lack of ability and initiative	(6%)
lack of perseverance	(6%)

While it may not be clear in the present study, to what extent these traits individually and collectively affect academic performance, there can be little doubt that some of the personality traits could have an important influence on academic performance.

#### 4.4.16 Pupils' Attitude to School

Pupils in the cohort were asked to indicate their reasons for attending school. The results are set out below.

TABLE 4.33

REASONS FOR ATTENDING SCHOOL

	Promoted group		Failure Group	
	Boys %	Girls %	Boys %	Girls %
Like school	63,5	71,0	66,9	77,4
Forced to attend	5,4	4,4	13,7	5,6
Strong desire to succeed in life	11,1	4,5	5,3	5,0
Dont know	20,0	20,1	14,1	12,0

The results show that more than two-thirds of the pupils in the

cohort like school. Approximately 5% of the pupils in both the *failure group* and the *promoted group* indicated that they were forced to attend school, except for the boys in the *failure group* where the percentage is 13,7. About 20% of the boys and girls in the *promoted group* indicated that they don't know why they attend school. In the *failure group* the corresponding percentages are 14,1% boys and 12,0% girls. An average of 5,7% of the pupils indicated that they have a strong desire to succeed in life. It must be pointed out that the pupils who had indicated that they like school could also have a strong desire to succeed in life.



REFERENCES

1. Kerlinger, F.N.: cited by Behr, A.L. *Methods and Techniques of Educational and Psychological Research*. Van Schaik, Pretoria, 1973 p.10.
2. Behr, A.L., op. cit., p.10.
3. Good, C.V. and Skates, D.E.: *Methods of Research, Educational, Psychological, Sociological*. Appleton - Century - Crofts N.Y. 1954 p.256.
4. Behr, A.L., op cit., p.10.
5. Platt, W.J.: *Research for Educational Planning - Notes on Emergent Needs*. UNESCO, International Institute for Educational Planning. Paris 1970 p.9.
6. Behr, A.L., op. cit., p.11.
7. Ibid., p.11.
8. Department of Indian Affairs - (Division of Education) Circular No. 28 of 1972 File 19/15/6/2.
9. Sugden, M.A.: "Chatsworth; Social and Economic Charistics of Population." *Journal of the University of Durban-Westville* Vol. 1. No. 2 1972, p.70.
10. Borg, W.R.: *Educational Research - An Introduction*. Longmans, new York, 1969 pp.171-174.
11. Ibid., pp.171-174.
12. Department of Indian Affairs - (Division of Education) *Report 1 January to 31 December 1974* Annexure C.
13. Behr, A.L., op. cit., pp.72-73.
14. Downie, N.M. and Heath, R.W.: *Basic Statistical Methods*. Harper & Row, New York 1965 pp.160-165.
15. Behr, A.L., op.cit., p.11.
16. Ferguson, G.A.: *Statistical Analysis in Psychology and Education*. Mc Graw - Hill & Co. New York 1976, p.187.
17. Behr, A.L., op. cit., p.75.
18. Wall, W.D. et al., op. cit., p.30.
19. Ibid
20. Van der Walt, N.: *Die Vraagstuk van Druiping op Skool - 'n Geskiedkundige Vergelykunde Studie*. Doctor Philosophiae, 1962 pp.98-99.
21. Miner, Betty: "Sociological Background Variables Affecting School Achievement" *Journal of Educational Research*. Vol.1

22. Chopra, S.: "Family Size and Sibling Position as related to measured intelligence and Academic achievement".  
*The Journal of Social Psychology*. Vol. 70. 1966 pp.133-137.
23. Glass, D.V.: *Social Mobility in Britain* . Routledge London, 1954.
24. Banks, Olive and Finlayson: *Success and Failure in the Secondary School - An Interdisciplinary Approach to School Achievement*. Methuen and Co. Ltd. London. 1973 p.92.
25. Miner, Betty, op. cit., p.373.
26. Banks and Finlayson, op. cit., p.94.
27. Ibid
28. Newson, J.: "Child Rearing Practices" *Educational Research in Britain - No. 3* Ed. Butcher, H.J. and Pont, H.B. University of London Press 1973, pp.57-59.
29. Behr, Dorothea: "The Study of the Occupational Preferences and Values of a Group of First-Year Indian Students at the University College of Durban. *Journal of the University of Durban-Westville*. Vol. 1 No. 2 1972 p.4.
30. Sampson, E.E.: "Birth Order, Need Achievement and Conformity,"  
*Journal of Abnormal Psychology* Vol. IXIV, 1962, pp.155-159.
31. Schachter, S.: "Birth Order, Eminence and Higher Education."  
*American Sociological Review* Vol. XXVIII, 1963 p.757.
32. Miner, Betty, op. cit., p.375.
33. Hodges, A. and Balow, A.: "Learning Disability - Relation to Family Constellation." *Journal of Educational Research* Vol. 55 1969 pp.41-42.
34. Chopra, S., op cit., pp.133-137.
35. Hodges, A. and Balow, A., op. cit., pp.41-42.
36. Miner, Betty, op cit., p.374.
37. Sampson, E.E., op cit., pp.155-159.
38. Kellmer Pringle, M.L.: *Able Misfits - The Educational and Behaviour Difficulties of Intelligent Children*. Longmans Group Ltd. London 1970 pp.108-109.
39. Ibid., p.79.
40. Stice, G.et al. cited by Miner, Betty op. cit., p.376.
41. Logue, G.D.: "An Investigation into the Suitability of the South Group Test for Indian Children in Durban." Masters' Dissertation, U.N. 1954 p.77.



42. Butcher, H.J. cited by Naylor F.D.: *Personality and Educational Achievement* John Wiley and Sons, Sydney, 1972 p.10.
43. Kellmer Pringle, M.L., op. cit., p.74.
44. Ekstrom, R.B.: "Experimental Studies of Homogenous grouping" *School Review* No. 69 1969 pp.216-226.
45. Bartlett, Ethel: "The Intelligence School Failure" *Review in Times Educational Supplement* 21 December 1962.
46. Ibid
47. Birch, N.G. and Gussow, J.D.: *Disadvantaged Children - Health, Nutrition and School failure.* Harcourt Brace, New York, 1970, p.3.
48. Schonell, F.: "The Slow Learning Child". *The Australian Journal in Education of Backward Children*, Nov. 1956 p.61.
49. Van der Walt, N., op cit., pp.197-198.
50. Ibid
51. De Wet, R.: "Vryetydse Leesgewoontes Van Indiërstudente" *Journal of the University of Durban-Westville.* Vol. 1 No. 2 1972 p.79.
52. Ibid
53. Harris, D.: "Factors affecting College Grades - A review of literature" *Psychology Bulletin* No. 37, 1970 p.52.
54. Ibid
55. Lucas, C.J. and Kelvin, R.P.: "Mental Health and Student Wastage: *British Journal of Psychiatry* No. 112. 1946, p.484.
56. Van der Walt, N., op. cit., pp.139-147.
57. Association for Supervision and Curriculum Development. - Editorial. *Year Book 1958.* A look at continuity in the School Programme. P.70.
58. Malherbe, E.G.: *Onderwys en die Armblanke* Doel 111, p.183.
59. High School dropouts: Research Division of the National Education association of the United States, Pamphlet, p.8.
60. Department of Indian Affairs- (Division of Education) : Circular No. DO of 1974. File 19/29/6/4.
61. Tyreman, M.J.: "Absence from School and its Treatment" *The Slow Learning Child.* Vol. 12 No. 2 Nov. 1965. pp.113-118.
62. Department of Indian Affairs - (Division of Education) File No. 19/15/6/2.



63. Miller, G.N.: *Success, Failure and Wastage in Higher Education*. George Harrap, London. 1970 pp.10-18.
64. Naylor, F.D.: *Personality and Educational Achievement* John Wiley and Sons. Sydney 1972 pp.4-7.
65. Rushton, J.: The Relationship between Personality Characteristics and School Success in eleven year old children." *British Journal of Educational Psychology*.
66. Matlin, A.H. and Mendelsohn, F.A.: "The relationship between Personality and Achievement variables in the Elementary School." *Journal of Educational Research* Vol.58 No.10. 1965 pp.457-59.
67. Taylor, R.G.: "Personality Traits and Discrepant achievement". *Journal of Counselling Psychology*. No.11 1964 pp.76-78.
68. Miller, G.W., op. cit., pp.10-18.

## CHAPTER FIVE

### 5. GENERAL CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 LIMITATIONS OF THE PRESENT STUDY

Before summarizing the main findings, it is necessary to draw attention to some of the limitations of the present study. In the first place the study of *failure* at the Standard VIII level was based on the pupils' performance in internal examinations. Although the use of such a criterion can be justified for the purpose of studying *failure per se*, yet it had the disadvantage of differing standards from school to school. In order to compare academic performance, an external examination common to all the pupils in the sample, would have been more reliable than an internal examination.

In the second place the role of the school in academic performance was not considered. It is within the school context that *success* and *failure* take place. Lafferty<sup>(1)</sup> in investigating high school *failure* in Texas, came to the conclusion that only 24% of the *failure* rate was caused by low ability of the pupils, but the school was to blame for 76% of the *failure* rate. There is growing evidence that a pupil's achievement is more immediately and strongly affected by teachers' attitudes towards him.<sup>(2)</sup> Good schools can offset the effects of a poor home, but bad schools can have harmful effects, particularly on children of moderate ability.<sup>(3)</sup>

However, any consideration of the school itself is outside the scope of this study.

Thirdly, the role of parents in the academic performance of their children was also not considered. The role of the parents in the pupils' academic performance is said to be extremely important.<sup>(4)</sup>

Behr<sup>(5)</sup> says that achievement motivation is related to certain kinds of parent-child interactions. It has been found, for example, that "where home discipline is accepting and love-orientated, there is a high need for achievement. On the other hand, the underlying causes for under-achievement in youngsters have their origin in hostility and resentment of parental authority perceived as restrictive and unjust." There is general agreement that parents' use of approval or disapproval, including reasoning and explanation, coercion-including physical punishment, are best suited for inducing the child's achievement motivation.<sup>(6)</sup> An investigation of the parental interaction is beyond the limits of this study. In the summary of the main findings and their implications, these limitations should be borne in mind.

## 5.2 DISCUSSION OF THE FINDINGS

In this section the main findings of the present study will be summarised. In the previous chapter, it was found that certain variables are significantly related to academic performance of both boys and girls, while some others appeared to show no significant relationship to academic performance of either boys or girls, and a few variables influenced the performance of girls differently from those of the boys.

In the discussion of the summary, the following procedure is adopted:

- (i) The variables examined will be divided into two broad categories, viz. variables within the pupils and variables extraneous to the pupils;
- (ii) The variables within the pupils which had common influence on academic performance of both boys and girls will be discussed, followed by a discussion of the variables within the pupils, which influenced the performance of the girls



differently from those of the boys and those variables which seemed to have no significant relationship to academic performance of both boys and girls.

- (iii) Finally the variables extraneous to the pupils will be considered, first by examining those variables which had common influence on the academic performance of both boys and girls, followed by those variables which influenced the performance of the girls differently from those of the boys, and finally those variables which seemed to have no influence on the academic performance of either boys or girls.

#### 5.2.1 Variables within the Pupils

It was found that certain variables which may be regarded as being within the pupils themselves relate significantly to the academic performance of both boys and girls. These variables are sex, religion, study habits and absenteeism. These appear to have common influence on both boys and girls. There were some variables which influenced academic performance of boys and girls differently. These include birth order, physical handicaps, reading habits and extra-curricular activities.

There were variables which showed no significant relationship to academic performance of either the boys or girls. These were health and the language spoken at home.

##### 5.2.1.1 Variables which relate significantly to academic performance of boys and girls

In respect of the sex of the pupils, it would appear that there is a significant relationship between sex and academic performance

(see Table 4.7). It was found that girls perform better than boys. These findings agree with other research findings<sup>(7) (8) (9)</sup>. It is possible that the girls are more conscientious than boys. Moreover girls are, on the average, more fluent than boys and possibly, the higher fluency could be an important factor in academic performance.

Apart from the possible reasons discussed earlier, research work by others have shown that girls are, on the whole, more fluent than boys. Fluency is being defined here as the ability to think, speak, read or write quickly.<sup>(10)</sup> This could be an important factor in academic performance. However, in the present study the difference in fluency between girls and boys was not investigated. It may well be that further research in this direction could provide interesting information.

Religion was found to be significantly related to academic performance (see Table 4.13). Although children of the Islamic religion in the sample tend to do better than pupils of the other two religions, i.e. Hindu and Christian, the results must be treated with caution. A more salient influence may stem from the cultural differences among members of different groups. Gross<sup>(11)</sup> found in his study of two Jewish groups, that within the same religious groups, subtle differences in cultural traditions had a profound effect on academic performance.

As regards IQ it was found to be significantly related to academic performance (see Table 4.17). It is generally believed that intelligence is of great importance in all scholastic work. According to Lavin<sup>(12)</sup> intelligence is without doubt associated with high

in those vocations to which it is directly relevant, it accounts for no more than about half the variations in performance.

In respect of study habits, it was found that boys and girls who devoted more time to homework did significantly better in the examination than those who devoted between 1 - 2 hours per week to it (see Table 4.22). Moreover it was found that in the *promoted group* more pupils did homework, whether their teachers set homework or not. In a study by Banks and Finlayson<sup>(13)</sup> which dealt with boys only, it was found that the successful boys spent significantly more time on homework than did the unsuccessful boys. They found that the actual conditions under which homework was carried out did not have a significant bearing on *success* and *failure*. What seemed to be more important was the internal motivation of the boy himself.

The findings in respect of absenteeism (see Table 4.21) are in agreement with other research findings which show that poor attendance is associated with poor academic performance.<sup>(14) (15)</sup>

As was pointed out in the previous chapter, a certain degree of absence from school can be attributed to ill health, but an investigation carried out by the Division of Education in 1975, revealed that pupils are being kept at home by their parents to look after younger brothers and sisters. Socio-economic factors may also be associated with poor attendance. In the investigation mentioned above, it was found that where both parents were working, the incidence of truancy and absenteeism was quite high.

The pupils in the present investigation were not subject to compulsory school attendance. In Indian education, compulsory school attendance applies to "every child who in 1973, or thereafter 1...



fully enrolls in Class (i)..... and such child shall continue to attend school regularly until the end of the year in which he reaches the age of fifteen years."<sup>(16)</sup>

#### 5.2.1.2 Variables which differently influenced the academic performance of boys and girls

The findings in respect of physical handicaps (sight, speech, etc.) show that the incidence of physical handicaps is greater among boys than girls in the sample. (see Table 4.20) This possibly explains the significant relationship found between this variable and academic performance among boys.

As regards reading habits, it was found that regularity in the reading of daily newspapers and magazines was significantly related to academic performance among boys, but it was not so with the girls. (see Tables 4.23 and 4.24) It would appear that pupils who read newspapers and magazines regularly tend to perform better academically. The findings suggest that possibly Indian girls find less time for leisure than boys. Girls are often required to help at home and even tend to their younger brothers and sisters.

Participation in extra-curricular activities also related significantly to the academic performance of boys, but it had not much influence on girls. It was found that boys generally spend more time on extra-curricular activities than girls. (see Table 4.26) This suggests that girls have less opportunities for extra-curricular activities - especially sporting activities. Boys generally participate in a variety of sporting activities both in and out of school. Girls also have less time to devote to sport since they are often called upon to assist with household chores.

These findings are in accord with those of Lucas<sup>(17)</sup> who found a significant relationship between performance and the amount of time spent on sport and other extra-curricular activities. However, Lucas found no sex difference with this variable. The possible explanation is that, apart from lack of time and fewer sporting opportunities, Indian girls are still conservative in their attitude to participation in out-door sporting activities. However, girls devote much time to household activities such as sewing, knitting, cooking etc. These may as well be a compensating factor for the lack of extra-curricular activities.

Birth order appears to be significantly related to academic performance (see Table 4.14). It was found that generally, first-born boys perform better academically than later-born children. These findings are in accord with other research findings<sup>(18) (19)</sup>. The possible explanation would be that first-born children are at an advantage in that their mothers have more time for shared activities. In Indian homes, first-born boys receive much attention from their parents. Parents also tend to expect more from first-born boys than from first-born girls. The aspirations and expectations for the first-born boys are also greater than for first-born girls. These may be possible reasons for first-born boys performing better than first-born girls.

#### 5.2.1.3 Variables which appear to have no significant relationship to the Academic performance of both boys and girls

As regards the health of the pupils, there appears to be no significant relationship to academic performance. (see Table 4.19) The findings are contrary to generally held views that the condition of a pupil's health could affect academic performance. Poor health



is said to be related to poor academic performance.<sup>(20)</sup> However, the findings of this study in respect of health have to be treated with reservation. It was pointed out that the pupils' responses in this regard cannot be taken as reliable. There is thus need for further exploration in this area.

In respect of the use of the library, it was found that there is no significant relationship between academic performance and the use of the libraries for borrowing books. (see Table 4.25) The possible explanation is that pupils pay more attention to prescribed set books than to borrowing books for leisure reading. Perhaps the pupils believe that reading books other than those prescribed, is not rewarding in the examination.

#### 5.2.1.4 Teachers' assessment of pupils' behaviour and personality traits

It was found that teachers' assessment of observed behaviour problems, viz. nervousness, withdrawn, restlessness, lack of concentration and cooperativeness, did not differ materially in the *promoted group* and the *failure group* or between boys and girls. It would appear that teachers did not readily relate the listed behaviour problems specifically to school work and thus were unable to distinguish these behaviour problems in respect of the *promoted* and the *failure group*. (see Table 4.31)

As regards personality traits, it was found that teachers' observations of the listed traits were generally rated average in respect of both the *promoted group* and the *failure group* as well as for boys and girls. However, teachers' observations in respect of initiative and zeal and perseverance were noted as



pupils who failed. (see Table 4.32)

The writer has the impression that the accuracy of the teachers' judgement in assessing pupils' behaviour problems and personality traits is doubtful. Therefore the results in this respect have to be treated with caution especially when the assessments centre around average.

The nature of the relationship between personality traits and academic performance has been the subject of numerous studies. (21) (22) (23)  
This is another area among Indian pupils which needs further research.

#### 5.2.1.5 Pupils' attitude to school

It was found that pupils generally like school. However, among the boys who failed about 13,7% indicated that they were forced to attend school. (see Table 4.33)

#### 5.2.2 Variables extraneous to the Pupils

Attention will now be paid to those variables which are extraneous to the pupils. These include: fathers' occupation, parents' level of Western education, family income, material comforts at home, family size, language commonly spoken at home, school transfer and choice of study direction.

##### 5.2.2.1 Variables which relate significantly to academic performance of boys and girls

In the analysis of the results in the previous chapter, it was found that significant relationship was found between the academic performance of both boys and girls and parents' level of Western education. (see Table 4.10) This relationship was more significantly re-

lated to the mothers' level of Western education than the fathers' level of education. The findings are in line with other research findings. (24) (25)

This is a welcome sign. As more and more girls attain a high level of education, their roles as mothers influence the home as an important agency in the education of the child. It is often said that when you educate a man you educate an individual, but when you educate a woman, you educate a whole community.

#### 5.2.2.2 Variables which differently influenced the academic performance of boys and girls

Family income appeared to be significantly related to the academic performance of boys but there was no such relationship between the academic performance of the girls and family income. (see Table 4.11) It is quite surprising to find that the performance of girls is in no way affected by family income. However, the information supplied by the pupils is open to doubt, as the difficulty in obtaining accurate income figures is well known.

Moreover, the pupils may not know exactly what the family income is. Further research is necessary to relate income with such material comforts as the possession of own car, television, radio etc. and academic performance.

#### 5.2.2.3 Variables which appear to have no influence on academic performance of both boys and girls

The following variables appear to have no significant relationships to academic performance of both boys and girls: fathers' occupation,

having one's own room at home, family size, language commonly spoken at home and the number of times pupils were transferred from one school to another.

As regards fathers' occupation, the present findings (see Table 4.8) are not in agreement with previous findings which show a positive relationship between academic performance and fathers' occupation. The possible explanation for this difference may lie in the fact that occupation in the present study was very narrowly categorised. This could have masked any significant relationship that might possibly have existed.

It is the writer's contention that occupation *per se* is not the overriding factor. Although a high status occupation is linked to better material comforts at home, it is parental love, warmth, inspiration or family discussion, that may have a more marked influence on pupil performance - than mere high occupational status. An interesting finding in Germany, carried out by Burger<sup>(26)</sup> between 1964-1966 found that the incidence of *failure* among children in Classes 8 - 11 in Bavaria was greater among doctors' children than any other group. It was found that the proportion of *failures* was as follows: children of doctors 53,9%, children of other graduates 45,8%, children of skilled workers 39,6% and children of unskilled workers 32,5%.

The hypothesis that having one's own room at home is significantly related to academic performance was not upheld in the present findings. (see Table 4.12) It is safe to suggest that very few Indian homes can afford to allocate a room to a single child. However, the findings indicate a trend that those pupils who do have their own room



perform better than those who do not have their own rooms.

As regards family size, there was no significant relationship between this aspect and academic performance (see Table 4.15). These findings appear to be in general agreement with other findings, notably those of Banks and Finlayson<sup>(27)</sup> who found that family size was unrelated to academic performance.

In respect of language commonly spoken at home, it was found that there is no significant relationship between academic performance and the language commonly spoken at home, (see Table 4.16) It was hoped to find to what extent the pupils' academic performance is influenced by the vernacular being spoken at home. According to Ramphal<sup>(28)</sup>, very often the English "used by elders in the home is crude and elemental. Literal translations of the mother tongue into English are common, resulting in distortions of idiom."

The results in the present study suggest that very little vernacular is presently spoken at home and the standard of English spoken in Indian homes has improved since Ramphal's study which was carried out nearly fifteen years ago. The educational level of the Indian community has improved considerably since then.

As regards school transfer, there is no significant relationship between academic performance and the number of times the pupils were transferred from one school to another. (see Table 4.27)

Although these findings are contrary to other research findings, (29) (30) it was pointed out in the previous chapter that the incidence of transfer from one school to another is minimal in view of the fact that Indians are a settled community in Natal. Even with resettlement in new housing units transfer generally takes place

once only. When pupils are transferred from primary schools to secondary schools, this is done by moving a whole class unit, thus causing very little disruption.

In respect of choice of study direction, the findings suggest that pupils *are* given the opportunity to choose a particular direction. However, it was found that a fairly high percentage of pupils fail in the Standard Grade. A plausible reason could be that either the Standard Grade does not adequately cater for differentiation or pupils are underachieving.

There appears to be an urgent need for a full investigation into the degree of differentiation not only in teaching methodology but also in the matter of differentiation of standards in the Higher Grade and Standard Grade examinations.

### 5.3 CONCLUSION

Although a few deviations were found, in general the findings in this study tend to substantiate previous research results. They do provide a systematic picture of some of the variables which affect academic performance. It is clear from the results that the differences in school achievement are too complex to attribute to a single cause; rather these differences are the final outcome of a long chain of unique, individual events. However, the findings of this study provide a framework within which the complex problem of *failure* can be conceptualised. It is hoped that the findings will begin to answer some of the questions posed in the opening chapter.



#### 5.4 RECOMMENDATIONS

In the light of the present findings, the following recommendations are suggested:

##### 5.4.1 The selection function of the Standard V Examination

The findings of this research throw some doubt on the predictive function of the Standard V examination. At present pupils are channelled into the Academic Course or into the Practical Course on the results of the Standard V examination. As stated elsewhere, the Practical Course is intended for pupils of below average intelligence who cannot cope with the normal academic course. This study has demonstrated that a proportionately large number of average and above-average pupils are promoted into the Practical Course.

It is therefore suggested that the two examinations, viz. half-yearly and the end of the year examinations, should not be the sole criteria for classification. A continuous process of evaluation of a pupil's progress through out the Standard V year is recommended. Such factors as IQ, ill-health, interest and aptitude should be taken into account. All aspects of the work done during the course of the year, including assignments and projects should have an important place in the overall assessment of the pupil's progress. When there is a disparity between a pupil's measured intelligence and his rate of progress, the cause should be investigated and suitable remedial measures taken.

It is further recommended that a Guide on Testing and Evaluation based on similar lines as the one prepared by the Cape Education Department<sup>(31)</sup> be compiled for principals and teachers. This Guide should also contain guidelines for classification, promotion and re-



#### 5.4.2 The Practical Course

It was found that after the initial classification at the end of Standard V, the practice of sifting goes on up to the Standard VIII level. As a result more and more pupils of average and above average ability are being channelled into the Practical Course. This sifting process can be abused by schools which may adopt a stringent process of sifting in order to attain a good pass rate in the ultimate Senior Certificate examination.

It is therefore recommended that (i) once the pupils have been classified on the basis of their overall performance at the Standard V level, no further classification in the Practical Course should be allowed as a matter of policy. Where any doubt exists the pupils should be permitted to continue with the normal Academic Course. A pupil who has been clearly identified as being suited to the Practical Course after being subjected to a battery of tests and assessments, then, after consultation with parents, the pupil should be placed in the Practical Course.

(ii) In order to allow for uniform standards and to prevent schools from adopting a stringent sifting process, a system of question banks should be considered. Many research workers in this field consider question banks to be the most promising moderating device. In short, this implies the construction of a large number of test questions in each subject. In order to be able to survive a standardization process, the questions must be objective or at least semi-objective. They are screened, pre-tested and then tried on a representative sample of pupils to ascertain difficulty levels. Satisfactory questions are then filed in a "bank" and subsequently used either by individual schools to draw up examination questions which teachers believe to

be valid for their pupils or for use by examining bodies to moderate group standards in schools using a system of internal assessment.

According to a Schools Council paper on Item Bank<sup>(32)</sup> the question or item banks are used to classify achievements which are universally applicable so that teachers may be made aware of what it is they are testing and why. The Human Sciences Research Council has already compiled item or question banks in collaboration with the Education Departments of the Transvaal, Natal, the Orange Free State and the Cape Province.<sup>(33)</sup>

The object of compiling the item bank was to supply schools with an objective measuring instrument to test their standards if they do not set external Senior Certificate examinations.

Initially the Department of Indian Affairs can work in collaboration with the Human Sciences Research Council to build up its own question bank. Schools can be informed about the procedure to draw questions from the question bank. Questions can be stored in a Departmental centre and once proper records are maintained it is possible to avoid teachers using the same set of questions over and over again in a particular school.

#### 5.4.3 Underachievement

The proportionately large number of average and above-average ability pupils in the Practical Course, suggests that these pupils are underachieving. Although underachievement as an educational phenomenon cannot be easily eradicated, its extent can be lessened. Such factors as poverty, lack of motivation, discordant atmosphere at home, moral and spiritual weakness on the part of one or more parents, may be contributory factors in underachievement. Of importance also



are material comforts at home which enrich the life of a child from the more well-to do homes and are denied his less fortunate classmates. By making full use of audio-visual educational aids and by arranging occasional excursions, the school can do much to compensate for the lack of these resources. The ability of the schools to provide learning experiences which motivate the pupils would appear to be of special consequence for those pupils who are not motivated in any other way. Thus by stimulating interest and enriching the school life of a child, the school can help him to develop and cultivate the frame of mind which is conducive to progress at school.

#### 5.4.4 Differentiation between Higher Grade and Standard Grade

It was shown that *failure* in the subjects taken on the Standard Grade is comparatively high. In order to determine the degree of differentiation between the Higher Grade and the Standard Grade, it is suggested that the Division of Indian Education carry out a full investigation into this aspect. At present a subject taken on the Higher Grade carries 400 marks and a subject taken on the Standard Grade carries 300 marks. A pupil has to obtain 33 $\frac{1}{3}$ % or (133 out of 400 marks) in individual subjects to pass on the Higher Grade and 33 $\frac{1}{3}$ % (100 out of 300 marks) to pass on the Standard Grade. A *failure* in a subject taken on the Higher Grade (except for Afrikaans second language) is recognised as a pass on the Standard Grade provided a minimum of 25% (or 100 marks) is obtained in that subject. This suggests that 25% on the Higher Grade is equal to 33 $\frac{1}{3}$ % on the Standard Grade. It should be pointed out that everything else being equal it is easier to obtain 100 marks out of 400 than 100 marks out of 300 marks. It may be argued that the subjects on the Higher



Grade are examined at a higher level than the subjects on the Standard Grade. But a preliminary investigation by the Education Planning Section into the degree of differentiation in certain subjects examined on the Higher Grade and Standard Grade in a recent Senior Certificate examination, showed that the degree of differentiation was minimal. (34)

There is an urgent need for a thorough investigation, not only into the degree of differentiation but also into the extent of differentiation in teaching methodology.

#### 5.4.5 To fail or not to fail

The phenomenon of *failure* is inherent in the school system. *Failure* rates will naturally be higher in school systems which enforce minimum achievement standards in each class than in school systems which practice "automatic" promotion. Whether the multiple purposes of education, both individual and social, are better met under rules that result in "automatic" promotion or by stringent examination systems, and what curriculum or criteria changes respond to individual pupil differences, are all questions deserving further inquiry.

#### 5.4.6 Establishment of an Education Research Bureau

At present the Education Division of the Department of Indian Affairs uses the services of Education Planners to carry out limited research and make recommendations in respect of educational planning. Recently the Human Sciences Research Council undertook certain projects on behalf of the Department of Indian Affairs. Although for the moment this arrangement appears to fill a vital and necessary educational planning function, it is the writer's contention that, for the results of research to be

be undertaken by the education authority concerned. Therefore it is recommended that consideration be given to the establishment of an Educational Research Bureau on similar lines to that of the Transvaal Education Department.<sup>(35)</sup> The function of the Research Bureau should be:

- (i) to organise and/or undertake research and experiments at the request of, or with the approval of the Director of Indian Education;
- (ii) to encourage research and experiments in connection with all aspects of education and to assist other researchers for which the Department provides facilities and information;
- (iii) to make recommendations in respect of all matters of an educational nature, such as organization of educational institutions, curriculum development, teaching methods and testing and evaluation.

#### 5.5 SUMMARY

This is a study of the incidence of *failure* in Indian secondary education in Natal, in which academic performance was considered against the background of a number of variables such as socio-economic factors, family size, birth order, IQ, health, absenteeism, study and reading habits, parents' level of Western education, family income, participation in extra-curricular activities and certain behaviour and personality traits.

A random sample of 1 787 pupils (1 092 boys and 695 girls) who wrote the Standard VII Academic Course examination in 1974 was selected from 16 Indian secondary schools in Natal.

Data were obtained by administering a set of questionnaires to the pupils and the form-teachers. Data processing was done by the ICL computer service.

The Chi-square statistical techniques was used to test for significance. The findings suggest that:

- (i) there are significant relationships between academic performance and the following variables: parents' level of Western education, religion, birth-order (especially among first-born boys) IQ and absenteeism;
- (ii) certain of the variables tested influenced the academic performance of the boys differently from those of the girls. These variables are family income, physical handicaps, reading habits and participation in extra-curricular activities. The trend was that these variables influenced the boys' performance more than the girls' performance.
- (iii) there were certain variables which were not significantly related to academic performance. These were: health of pupils, use of the library for borrowing books, fathers' occupation, having one's own room, family size, language commonly spoken at home and the number of times the pupils were transferred from one school to another

Finally certain recommendations are suggested with a view to reducing *failure* at school.



REFERENCES

1. Lafferty, H.A.: "A Study of the reasons for pupil failure in school." *Educational Administration and Supervision*, Vol. 24, 1938, p.18.
2. Behr, A.L.: "Meeting the needs of the underachieving child in South Africa: An analysis of current resources and needs". An address delivered at the National Conference on the Underachieving Child - University of Durban-Westville 30 September 1974, p.6.
3. Ibid.,
4. Banks, O, and Finlayson, D.: *Success and Failure in the Secondary School*. Methuen & Co. Ltd., London, 1973. pp.83-84.
5. Behr, A.L.: op. cit., p.6.
6. Ibid.,
7. Pringle, Kellmer, M.L.: *Able-Misfits- The Educational and Behaviour difficulties of Intelligent Children* Longmans, London 1970. p.108.
8. Mearing, Judith, S.: Sex and cultural differences in performance on certain verbal creativity measures." *The Journal of Educational Research*, Vol. 61 No. 3 Nov. 1967. pp.114-116.
9. Van der Walt, N.: *Die Vraagstuk van Druiping op Skool - 'n Geskielkundige - Vergelykende Studie* Doctor Philosophiae Thesis UNISA 1962 pp:97-99.
10. Mearing, Judith, S.: op. cit., pp.114-115.
11. Gross, M.: "Learning Readiness in two Jewish Groups" - Occasional Paper Center for Education, New York, 1967. p.78.
12. Lavin, D.E.: *Predictions of Academic Performance* cited by Butcher, H.J. *Human Intelligence its Nature and Assessment* Methuen, London, 1968 p.28.
13. Banks, O, and Finlayson, D.: op. cit., p.182.
14. Van der Walt, N.: op. cit., pp.150-152.
15. Tyreman, M.J.: "Absence from School and its treatment." *The Slow Learning Child* Vol. 12, No. 2 Nov. 1965. pp.113-118.
16. Pillay, M.G. and Naguran, C.A.: "A Decade of Growth and Progress" *Fiat Lux* Vol. 11. No. 3 May-June 1976, p.22.
17. Lucas, C.J.: "Mental Health and Student Wastage" *British Journal of Psychiatry* No. 112, 1946, p.484.
18. Pringle, Kellmer, M.L.: op. cit., p.79.

19. Wells, G.: "Childrens' Early Language Experience" *Educational Review* Vol. 27 No.2 Feb. 1975. p.123.
20. Harris, D.I.: *Emotional Blocks to Learning - A Study of the reasons for failure in School* The Free Press, New York 1961 pp.101-107.
21. Naylor, F.D.: *Personality and Educational Achievement* John Wiley - Sydney 1972, p.10.
22. Taylor, R.G.: "Personality Traits and Discrepant Achievement" *Journal of Counselling Psychology* Vol. 11, 1964 pp.76-82.
23. Barton, K. and Dielman, T.E.: "Personality and IQ Measures as Predictors of School Achievement" *Journal of Educational Psychology* Vol. 63 No. 4 1972, pp.398-404.
24. Banks, O, and Finlayson, D.: op. cit., p.94.
25. Behr, Dorothea: *An Investigation into the Proficiency and Background Factors likely to affect performance of a group of first-year students at the University College, Durban.* No. 1965, p.7.
26. Burger, R.: "Are Doctors' Children Bad at Schoolwork?" *Education in Germany* No. 12/1967 Bad Gadesberg p.21.
27. Banks, O and Finlayson, D.: op. cit., p.93.
28. Ramphal, : "A Study of Three Current Problems of Indian Education" Doctor of Philosophy Thesis U.N. 1961 pp.266-267.
29. Louttit, C.M.: *Clinical Psychology* Harper Brothers, New York 1947 pp.246-251.
30. Van der Walt, N.: op. cit., pp.139-147.
31. Provincial Administration of the Cape of Good Hope.  
(Department of Education) "Teaching in the Primary School" -  
Suggestions for the consideration of Principals and Teachers.  
1973.
32. Schools Council paper on Item Banking. Discussion with Behr, A.L.
33. Human Sciences Research Council (Institute for psychometric Research)  
Item Banks 1431/2 PS Pretoria 1977.
34. Department of Indian Affairs (Division of Education) File No.  
19/20/6/2.
35. Transvaal Education Department: Report of a Mission to oversea  
countries Part 2. Educational Research April 1965. p.76.



S E L E C T E D   B I B L I O G R A P H Y

---

- AINSWORTH, MARJORIE: "The Effects of Environmental Factors on Secondary Educational Attainment in Manchester: A Plawden follow-up" *Schools Council Research Studies* Mac Millan Educational Ltd., London 1974.
- AMES, V.: "Factors related to high School achievement" *Journal of Educational Psychology* Vol. XXXiv 1943.
- ASHBELL, B.: *The New Improved American* Mc Graw - Hill, New York, 1965.
- BANKS, O., FINLAYSON, D. : *Success and Failure in the Secondary School - An Inter-disciplinary Approach to School Achievement* Methven & Co. Ltd. London 1973.
- BARTLETT, ETHELL: "The intelligent school failure" *Times Educational Supplement* Dec. 21 1962.
- BEEZ, W.V.: "Influence of biased Psychological reports on teacher behaviour and pupil performance" *Social Psychology of Teaching* Ed. Morrison and McIntyre Penguin 1972.
- BEHR, A.L. : *A Textbook of Educational Method* J.L. van Schaik Ltd. Pretoria 1973
- BEHR, A.L. : "Historical Perspectives to Indian Education" *Fiat Lux* Vol. 5 No. 9 November 1970.
- BEHR, A.L. : "Meeting the Needs of the Underachieving Child in South Africa : An Analysis of Current Resources and Needs." An address delivered at the National Conference on the Under-achieving Child, held at University of Durban-Westville. 30/9/74.
- BEHR, A.L. : *Methods and Techniques in Educational and Psychological Research* Van Schaik Ltd. - Pretoria 1973.
- BEHR, A.L. : "Some present day Innovations in Education and their Implications" An address delivered to the Chatsworth Branch of SAITA, 28 May 1968 *The Teachers' Journal* July 1968.
- BEHR, DOROTHEA: "The Study of the Occupational Preferences and Values of a Group of First Year Indian Students at the University College of Durban. *Journal of the University of Durban-Westville.* Vol. 1 No. 2. Nov. 1972.
- BEHR, A.L., & Mac Millan R.G. : *Education in South Africa*, Van Schaik Pretoria 1971.
- BERNSTEIN, B.: "Some Psychological Determinants of Perception - an Enquiry into Sub-cultural Differences" *British Journal of Sociology.* No. 9 1958.
- BIRCH, N.G. & GUSSOW, J.D. : *Disadvantaged Children - Health, Nutrition and School Failure* Harcourt Brace, New York 1970.



- BOOYENS, J., ALSOPP, V.M., NAIDOO, P.R., MAKAN, C.V., MANJOO & CAMPBELL, G.D.: The Nutritional somatometric and socio-economic status of twenty Chatsworth Indian Households *University of Durban-Westville Journal* 2(1) Nov. 1973.
- BORG, W.R.: *Educational Research - An Introduction* Longmans - New York 1969.
- BRICKLIN, B. & BRICKLIN, P.M.: *Bright Child - Poor Grades - The Psychology of Underachievement* Delacorte Press : New York 1967.
- BRUNER, J.S.: *The Relevance of Education* George Allen & Unwin London 1972.
- BURT, C.: *The Causes and Treatment of Backwardness* University of London Press 1958.
- CHOPRA, S.L.: "Cultural Deprivation and Academic Achievement" *The Journal of Educational Research* - Vol. 62 Aug. 1962.
- CHOPRA, S. : "Family Size and Sibling Position as related to measured intelligence and academic achievement." *The Journal of Social Psychology* Vol 70 1966.
- CHOPRA, S.L.: "Parental occupation and academic achievement of high school students in India. *The Journal of Educational Research* Vol. LX 1967.
- CHOWDHORY, P.: *Report of an Investigation into the Problem of Wastage and Stagnation in Primary Schools in the District of 24 Paraganas Calcutta* Directorate of Education: West Bengal 1965.
- CLAUSEN, J.A. & WILLIAMS, J.R.: *Sociological Correlates of Child Behaviour*. Sixtysecond Year-book of the National Society for the Study of Education. Chicago University Press. Part 1 1963.
- CLOUGH PATRICIA: "500 000 Dropouts - But Public Indifference. *The Times Educational Supplement* No. 3049 2 Nov. 1973.
- COLEMAN, J.S. et al.: *Equality of Educational Opportunity* U.S. Govt. Printing Office Washington. D.C. 1960.
- COOMBS, R.H., & DAVIES, V.: "Socio-Psychological Adjustment in Collegiate scholastic success". *The Journal of Educational Research* Vol. 61. No. 4. Dec. 1967.
- CRAIG, J.K.: "Assessment in Secondary Schools with Special Reference to Certain Overseas Countries" Lecture delivered at the National Conference on Evaluation. 5 July 1974 Witwatersrand University.
- CULLEN KATHLEEN: *School & Family : Social Factors in Educational Attainment*. Gill and MacMillan Dublin 1969.
- CURRY, R.L.: "The effect of Socio-Economic status on the scholastic achievement of sixth grade children." *The Bristish Journal of Educational Psychology* Vo. XXXII 1962.

- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular I.E.  
No. 27 of 1967.
- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular I.E.  
No. 22 of 1968. File No. 19/15/6/2.
- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular I.E.  
No. 32 of 1971.
- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular  
Minute BD of 1972.
- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular I.E.  
No. 28 of 1972.
- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular  
Minute A.W. of 1973.
- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular No.  
D.O. of 1974.
- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular I.E.  
No. A.Y. of 1974.
- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular I.E.  
No. 27 of 1975.
- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular I.E.  
No. 32 of 1976.
- DEPARTMENT OF INDIAN AFFAIRS Circular I.E. No. 4 of 1977.
- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular I.E.  
No. 25 of 1977.
- DEPARTMENT OF INDIAN AFFAIRS (Division of Education) Circular  
Minute BB of 1975.
- DEPARTMENT OF STATISTICS: Population Census 1970. 8 Dec. 1975.
- DEUTSCH, M.: "Some Psychological Aspects of learning in the Disadvantaged  
Child". (Studies of the Social Environment and the Learning  
Process) *Basic Books Inc.* New York 1967.
- DE WET, R.: "Vryetydse Leesgewoentes Van Indiërstudente" *Journal of  
the University of Durban-Westville* Vol. 1 No. 2 Nov. 1972.
- DOUGLAS, J.W.B.: *The Home and the School* Mac Gibbon and Kee London,  
1964.
- DOWNIE, N.M. and HEATH, R.W.: *Basic Statistical Methods*. 2nd edition  
A Harper International Student Reprint. New York 1965.
- EKSTROM, R.B.: "Experimental Studies of Homogenous grouping" *School  
Review* No. 69. 1969.



- FERGUSON, G.A.: *Statistical Analysis in Psychology and Education* Mac Graw - Hill Book Co. New York 1976.
- FINLAYSON, D.S.: "Towards a Socio-Psychological View of School Achievement" *British Journal of Educational Studies*. Vol. XXI No.3 Oct. 1973.
- FANTINI, M.D. AND WEINSTEIN: "*The Disadvantaged*" - Challenge to Education. Harper & Row. New York 1968.
- GETZELS, J.W. AND THELAN, H.A.: "A Conceptual Framework for the Study of the Classroom Group as a Social System, *Social Psychology of Teaching* (eds.) Morrison, A. and Mc Intere, D. Penguim Books 1972.
- GLASS, D.V.: *Social Mobility in Britain* Routledge London, 1954.
- GOLDEN, M. AND BIRNS, B.: "Social Class and Cognitive Development in Infancy" *Merryll - Palmer Quarterly of Behaviour and Development* - Detroit: Vol. 14. No. 2. 1968.
- GOOD, C.V. AND SKATES, D.E.: *Methods of Research, Educational, Psychological, Sociological*. Appleton - Century - Crofts N.Y. 1954.
- GULLIFORD, R.: *Backwardness and Educational Failure* National Foundational Research - England & Wales. 1969.
- HARRIS, D.: "Factors affecting College Grades - A review of literature" *Psychology Bulletin* No. 37, 1970.
- HAVINGHURST, ET. AL.: *Growing up in River City* - John Wiley - New York, 1962.
- HESS, R.D. & SHIPMAN, V.C.: "Early Experience and the Socialisation of Cognitive Modes in Children" *Child Development* Vol. 36 - 1965.
- HODGES, A. AND BALOW, A.: "Learning Disability - Relation to Family Constellation" *Journal of Educational Research* Vol. 55. 1969.
- HOLT, J.: *How Children fail* Pitman - New York - 1964.
- JENSEN, A.R.: "Intelligence Learning Ability and Socio-Economic Status" in *Journal of Special Education* (Philadelphia) Vol. 3. No. 1 1969.
- JENSEN, A.R.: "The culturally disadvantaged: Psychological and Educational Aspects" reproduced in *The Teachers' Journal* June 1968 - South African Indian Teachers' Association.
- KNELLER, G.F.: *Existentialism in Education* John Wiley and Sons New York 1958.
- KNELLER, G.F. ed.: *Foundations of Education* John Wiley - New York 1971.



- LANGELAND, A.: "Aspects of Failure" *International Review of Education* Vol. III 1957.
- LLOYD, W.B.: External Examination - A Brief Historical Survey *Fiat Lux* Vol. 10, No. 1 Feb. 1975.
- LOTTER, J.M.: *Socio-Ekonomiese Opname van Indiër in Natal. Deel 4: Opvoedkundige Peil en Skool Bywoning* - Human Sciences Research Council - Pretoria 1975.
- LUCAS, C.J. AND KELVIN, R.P.: Mental Health and Student Wastage" *British Journal of Psychiatry* No. 112 1946.
- MALHERBE, E.G.: *Education in South Africa* Vol.11 1923-1975. Juta and Co. Ltd. Cape 1977.
- MALHERBE, E.G.: Onderwys en die armblanke Doel III.
- MATLIN, A.H. AND MEDELSON, F.A.: "The relationship between Personality and Achievement variables in the Elementary School." *Journal of Educational Research* Vol. 58 No. 10, 1965.
- MEARIE JUDITH: "Sex and Cultural Differences in verbal creativity measures" *The Journal of Educational Research* Vol. 61. No. 3. Nov. 1967.
- MILLER, G.W.: *Success, Failure and Wastage in Higher Education* George Harper & Co. London 1970.
- MINER, BETTY: "Sociological background Variables affecting School Achievement." *Journal of Educational Research* No. 8 April 1968. Vol. 61.
- MUSGROVE, F. AND TAYLOR P.H.: "Pupils expectation of Teachers" *Social Psychology of Teaching* - Penguin Books, London 1972.
- NAGURAN, C.A.: "Differentiated Education well on its way." *Fiat Lux* Vol. 10. No. 6 June/July 1975.
- NAIDOO, B.A.: "Indian Education with Special Reference to Socio-Economic Aspects. *SAITA Teachers' Journal* Nov. 1969.
- NAIDOO, K.P.: "Secondary Education for Indians in Natal" *Teachers' Journal* - Organ of the South African Indian Teachers' Association Vol. XVI May 1967 No. 1.
- NATAL EDUCATION DEPARTMENT: *Schools Hand book Directions for the Conduct and Control of Government European and Government Aided Indian Schools.*
- NATAL EDUCATION DEPARTMENT:- Senior Certificate Examination Handbook 1966.
- NAYLOR, F.D.: *Personality and Educational Achievement* - John Wiley & Sons, Australasia Sydney, 1972.
- NEL, B.F.: "A Phenomenological approach to the problems of modern youth." *Education and our Expanding Horizons* II N 1961

- NEL, P.R.T.: *Report on Education for Indian in South Africa*. Unpublished Report to the Minister of Indian Affairs. Annexure B. June 1964.
- NEWSON, J.: "Child Rearing Practices" *Educational Research in Britain*. No. 3 Ed. Butcher, H.J. and Pont, H.B. University of London Press 1973.
- NIVEN, J.: "Assessment of What and for What in the Primary School" *The Transvaal Educational News* Vol. LXXIV No.8. Aug. 1971.
- OSMAN, E.: "Education and the Indian Girl." *Fiat Lux* Vol. 10, No.3. April 1975.
- PAUK, W.J.: "Are Present Reading tests valid for Both Girls and Boys?" *The Journal of Educational Research* 1960.
- PILLAY, M.G. AND NAGURAN, C.A.: "A Decade of Growth and Progress" *Fiat Lux* Vol. 11 No.3 May/June 1976.
- PLATT, W.J.: *Research for Educational Planning* UNESCO: International Institute for Educational Planning. Paris 1970.
- PROVINCE OF NATAL: Report on Provincial Education Committee (Wilks Report) 1946.
- PROVINCE OF NATAL: Report of the Director for the year 1945.
- PYPER: Parliamentary Debates Dept. of Indian Affairs - File 19/46/4/3.
- Raad vir Geestewatensloplike Narvoning Pretoria 1970 - verslag Nr.- M.T. 2 - Die 1965 Talentopnometoets program.
- RAMPHAL, C.: "A study of three current Problems of Indian Education" Thesis - for Doctor of Philosophy U.N. 1961.
- ROSENTHAL, R. & JACOBSON, L.: *Pygmalion in the Classroom* Holt Rinehart Winston. New York 1968.
- RUSHTON, J.: The Relationship between Personality Characteristics and School Success in eleven years old children. *British Journal of Educational Psychology*.
- SAMPSON, E.E.: "Birth Order, Need Achievement and Conformity," *Journal of Abnormal Psychology* Vol. IXIV, 1962.
- SCHACHTER, S.: "Birth Order, Eminence and Higher Education." *American Sociological Review* Vol. XXVIII, 1963.
- SCHONNEL, F.T.: "School Failire" *The Slow Learning Child*. Nov. 1956.
- SCHONELL, F.: "The Slow Learning Child." *The Australian Journal of Education of Backward Children*, Nov. 1956.
- SCHULMAN, PATRICIA: "An investigation into the Performance of a Group of Durban Indian School Children on the Weschler Intelligence Scale for Children." Unpublished M.A. Thesis (1970)



- SILBERMAN, C.E.: *Crisis in the Classroom - The Remaking of American Education*. Vintage Books: New York 1970.
- SINHA, D.: "A Psychological Analysis of some factors associated with Success and Failure" in *University Education*. *Indian Educational Review* (1) 1966.
- SMILANSKY, MOSHE AND SARAH: "Intellectual Advancement of Culturally Disadvantaged Children" in *International Review of Education* Vol. XIII 1967. No. 4.
- SOUTH AFRICAN INDIAN TEACHERS ASSOCIATION: *The Teachers' Journal*, June 1968.
- SUID AFRIKAANSE BURO VIR RASSE:- *Aangeleenthede 1975 Indiërbevolking van Suid Afrika, Pretoria*.
- SUGDEN, M.A.: "Chatsworth: Social and Economic Characteristics of the Population. *Journal of the University of Durban-Westville*. Vol. 1 No. 2. 1972.
- THE JOINT MATRICULATION BOARD: *Matriculation Examination Handbook*, 1977 Pretoria Part 1.
- THE NATAL MERCURY: 26 July 1975.
- THE NATAL MERCURY REPORT: 18 January 1972.
- THE TRANSVAAL EDUCATIONAL NEWS: Vol. LXXIV No.8. December 1977.
- T.O.D. Verslag deur die Komitee insake gedifferensieerde middlebare Onderwys vir Blankes 1957.
- THORNDIKE: "Selected factor influencing over - and under achievement in young school age children" in *Review of Education Research* Vol. 44. No. 4. Fall, 1974.
- TIZARD, J.: "Intelligence and Race Theory" *Daily News* 28 April 1975.
- TRANSVAALSE ONDERWYSDEPARTMENT: "Druiping in Standard 9." Ten opsigte van alle Provinsiale Hoërskole in Transvaal - Desember 1965 NR. 144. Uitgevoes in die Onderwysburo Oktober 1967.
- TYREMAN, M.J.: "Absence from School and its Treatment" *The Slow Learning Child*. Vol. 12 No. 2 Nov. 1965.
- UNIVERSITY OF NATAL: (Department of Economics) *A Survey of Indian Housing in Durban*.
- UNIVERSITY OF NATAL: (Department of Economics) "The Indian Domestic Budget" *Additional Report No. 6 of Natal Regional Survey - Keartlands*. Durban 1969.
- VAN DER WALT, N.: Failure at School 'Part II' *Fiat Lux* Vol. 7. No. 10. December 1972.



- VAN DER WALT, N.: "Nursery School Education, Department of Indian Affairs" in *Early Childhood Education: The Nursery School Association of South Africa*.
- VAN DER WALT, N.: Die Vraagstuk van druiping op skool - 'n Geskiedskundige - Vergelykende Studie, P.H.D. Thesis University of South Africa. 1962.
- VAN WYK DE VRIES: *Main Report of the Commission of Inquiry into Universities* RP25/1974 Government Printer.
- WALL, W.D. SCHONNEL, F.J. AND OLSON, W.C.: *Failure at School - An International Study*. UNESCO Institute for Education. Hamburg, 1962.
- WERNER, E.E. AND SIMONIAN, K.: "Ethnic Socio-Economic states differences in Abilities and Achievement in Hawaii" *Journal of Social Psychology* (Provincetown) Mass Vol. 75 1968. pp.43-59.

## APPENDIX A

1. Chi-square used to compare expected scores or values with actual scores or values.

The formula for the chi-square test is:

$$\text{Chi-square } (X^2) = \sum \left\{ \frac{(A - E)^2}{E} \right\}$$

A = actual scores or value, and

E = expected score or result.

## 4A Boys

ACADEMIC PERFORMANCE OF BOYS AND MOTHERS' LEVEL OF  
WESTERN EDUCATION

	None	Cl.(i)- Std. 2	Std. 3 - 6	Std. 7 - 10	Total
Pass	239 a	173 b	367 c	136 d	915
Fail	<u>34 e</u>	<u>42 f</u>	<u>54 g</u>	<u>14 h</u>	<u>144</u>
	273	215	421	150	1 059

	A	E	A-E	(A-E) <sup>2</sup>	$\frac{(A-E)^2}{E}$
a	239	235,8	3,12	9,74	0,041
b	173	185,7	-12,76	162,94	0,877
c	367	363,7	3,24	10,53	0,028
d	136	129,6	6,39	40,91	0,315
e	34	37,12	3,12	9,74	0,262
f	42	29,23	12,76	162,94	5,574
g	54	57,24	3,24	10,53	0,184
h	14	20,39	6,39	40,91	2,006

$$X^2 = 9,287$$

$$X^2 = 9,287 \text{ for } 3df$$

$$p < 0,05$$

Significance  $p < 0,05$

## APPENDIX A Cont.

2. Chi-square computed in a fourfold table by the use of the formula below. This formula avoids the calculation of expected frequencies.

$$\text{Chi-square} = \frac{N(ad - bc)^2}{(a+b)(c+d)(a+c)(b+d)}$$

To determine whether there is a significant difference in the academic performance of boys who speak English at home and those that speak the vernacular.

	English	Vernacular	Total
Pass	742 (a)	176 (b)	918 (a+b)
Fail	<u>112</u> (c)	<u>33</u> (d)	<u>145</u> (c+d)
	854 (a+c)	209 (b+d)	1 063 (N)

$$X^2 = \frac{1\ 063 (742 \times 33 - 112 \times 176)^2}{918 \times 145 \times 854 \times 209}$$

$$= \frac{1\ 063 (24\ 486 - 19\ 712)^2}{133\ 110 \times 178\ 486}$$

$$= \frac{1\ 063 \times 22\ 791\ 076}{23\ 758\ 271\ 460}$$

$$= \frac{24\ 158\ 540\ 560}{23\ 758\ 271\ 460}$$

$$X^2 = 1,01 \text{ for 1df}$$

$$p < 0,01$$





## APPENDIX B Cont.

12. Number of days the pupil was absent in 1974

Days

0-9	10-19	20-29	30+

13. Below are a series of descriptions of behaviour shown by children. After each statement are three columns: DOESN'T APPLY, APPLIES SOMEWHAT and CERTAINLY APPLIES. If the child definitely shows the behaviour described by the statement place a cross in the space CERTAINLY APPLIES. If the child shows the behaviour described by the statement but to a lesser degree or less often place a cross in the space under APPLIES SOMEWHAT. If, as far as you are aware, the child does not show the behaviour place a cross under DOESN'T APPLY.

- 13.1 Nervous  
 13.2 Withdrawn  
 13.3 Restless/Inattentive  
 13.4 Lack of concentration  
 13.5 Co-operative

CERTAINLY APPLIES	APPLIES SOMEWHAT	DOESN'T APPLY

14. Please place a cross(X) in the appropriate space for each of the following personality traits.

PERSONALITY TRAIT	Very Weak	Weak	Average	Good	Outstanding
14.1 Initiative and zeal					
14.2 Self-confidence					
14.3 Perseverance					
14.4 Reliability					
14.5 Social adaptability					

15. How well do you know this pupil?

Very well  Moderately well  Not very well

16. Name of Teacher \_\_\_\_\_

THANK YOU



APPENDIX C

UNIVERSITY OF DURBAN-WESTVILLE  
(DEPARTMENT OF EMPIRICAL EDUCATION)

QUESTIONNAIRE

CODE

A

9
---

To be answered by all the pupils who were in Std. 8 Academic group in 1974.

Dear Student,

Please complete the following questions as accurately as possible. The information you and others provide will be used in a Research Study on how pupils perform at school. I am particularly interested in why pupils fail. I am sure your responses, whether you passed or failed in 1974, will contribute significantly towards solving some of the problems we face in education.

Please remember that all information you provide will be treated as strictly confidential. You and your school will not be identified.

Most of the questions merely require a cross (X) in the appropriate space. A few questions require ranking in order of importance.

If a question does not apply to you, please place a cross (X) in the not applicable column.

Thank you for your cooperation.

1. a. Name of your school: \_\_\_\_\_

b. Your code number: \_\_\_\_\_

c. Your present standard

Std. 8	Std. 9

d. Sex

Male	Female

e. How old were you on 31/12/1974?

13	14	15	16	17	18	19	20+ yrs

f. Religion:

Hindu	Islam	Christian	Other (state)



## APPENDIX C Cont.

g. What Indian language group do you belong to?

Tamil	Hindu	Telugu	Gujerati	Urdu	Other(state)

h. What language is *mainly* spoken at home?

English	Tamil	Hindu	Telugu	Gujerati	Urdu	Other

2. a. Is your father living?  
 b. Is your mother living?  
 c. Are your parents divorced or separated?  
 d. Have you a step-father?  
 e. Have you a step-mother?  
 f. Are you living with your parents?  
 g. Are you living with friends or relatives?  
 h. Does your mother (or step-mother) work?  
 i. Is your father working?

Yes	No	Not Applicable

3. a. How many brothers are living with you?

1	2	3	4	5	6	7	8+

b. How many sisters are living with you?

c. Are you first born, intermediate born or last born?

First	Intermediate	Last

4. a. What standard of education did your father and mother receive at school?

	None	Cl.i-Std.2	Std. 3-6	Std. 7	Std. 8	Std. 9	Std. 10
Father							
Mother							





## APPENDIX C Cont.

6. a. Would you consider the socio-economic condition of the area in which you live to be:

Poor	Average	Above Average	Wealthy

- b. Please state the name of the district where you live.  
(e.g. Chatsworth, Asherville, City etc.)
- \_\_\_\_\_

7. a. In which of the following sports did you participate in 1974?

Soccer Cricket	Table Tennis	Athletic	Karate	Judo	Swimming	Other (state)	None

- b. About how many hours per week did you spend in sports last year?

less than 1 hr.	2 to 3hrs.	4 to 5hrs.	6 to 7hrs.	8-10hrs.	None

- c. Did you take part in

School debates	School plays	Not Applicable

- d. Do you read the newspapers?  
e. Do you read any magazines?  
f. Do you borrow books from the library?

Rarely or Never	Sometimes	Regularly

- g. Which newspaper(s) do you read regularly?

- h. Which magazine do you read regularly?
- \_\_\_\_\_

8. a. About how many hours per day do you spend in doing homework?

Less than 1 hr.	1-2 hrs	2-3 hrs.	3-4 hrs.	None





## APPENDIX C Cont.

13. What course of study did you follow in 1974?  
(e.g. G35 C4 S2 D3 etc.) \_\_\_\_\_

14. Did you choose this course because:

- a. Your teacher/principal advised you  
b. It was your parent's choice  
c. It was your own choice  
d. Your friend took the same course  
e. You were forced to take it against your will by your teacher/ principal

Yes	No	Don't know

15. Below is listed a number of subjects. Please place a cross (X) in the appropriate column if it affects you.

Column 1: Place a cross (X) opposite the subject you took last year.

Column 2: Place a cross (X) opposite the subject if you took it on the Higher Grade.

Column 3: Place a cross (X) opposite the subject if you took it on the Standard Grade.

Column 4: Place a cross (X) if you FAILED the subject.

	1	2	3	4
	Subject	took on the Standard Grade	took on the Higher Grade	Subject failed
English				
Afrikaans				
Latin				
Biology				
Physical Science				
Mathematics				
History				
Geography				
Accounting				
Economics				
Business Economics				
Typing				
Home Economics				
Housecraft				
Other				



APPENDIX C Cont.

16. Did you fail to obtain the aggregate marks last year?  
 17. Did you fail to pass Std. 8 in 1974?

Yes	No

a. Total number of subjects you failed in 1974

0	1	2	3	4	5	6

18. If you failed to pass Std. 8 in 1974 please rank the following reasons for your failure in order of importance.

Place 1 if it is the most important reason for your failure

Place 2 if it is a contributory reason for your failure

Place 3 if you are not sure.

Place a cross (X) if it does not apply to you.

You did not work hard	School work was not interesting	Wrong choice of subjects	You were sick	Not sure	Not Applicable

19. What do you wish to become after you leave school?  
 (Place a cross (X))

seek work	become a teacher	become a lawyer	become an accountant	enter business	other specify	don't know

20. Do you attend school because:

- a. You like school  
 b. You are forced to attend school  
 c. You have a strong desire to succeed in life

Yes	No	Don't know

THANK YOU.