

TR 89-40

**EDUCARE WORK IN CISKEI
WITH SPECIAL REFERENCE TO
THE KEISKAMMAHOEK DISTRICT**

THESIS

Submitted in Fulfilment of the
Requirements for the Degree of
MASTER OF EDUCATION
of Rhodes University

by

LUCIA OOSTHUYSEN

January 1989

ABSTRACT

High drop-out rates in the sub-standards in developing countries prompted the researcher to investigate preschool education in first and third world countries, and attend to the related problem of school readiness.

The rapidly expanding Educare preschool project in the rural area of Keiskammahoek in Ciskei was investigated as an example of community-based low-cost preschool education.

A final sample of 41 children who had attended Educare Centres were matched to a control group on age, sex, primary school (where possible), and breadwinner's occupation.

The Abbreviated Aptitude Test for School Beginners (standardised on Xhosa-speaking school beginners) was used to test for significant differences between the two groups six to seven weeks after school entry. A t-test was used on raw scores and chi-squared tests on staves. No significant difference was found between the means of the experimental and control groups. On a subjective rating scale for general-linguistic development and socio-emotional adjustment, no significant difference between means of the experimental and control groups was found. The experimental group's failure to perform better than the control group, could be ascribed to various reasons, amongst others, the possible shortcoming that the pairs were not matched on intelligence, severe lack of equipment in Educare Centres, large numbers of children in the majority of groups, uniform programmes for a wide age range, irregular attendance of children, the low level of training of supervisors and poor home conditions.

Scholastic abilities of school beginners in the Keiskammahoek District, as tested, were poor. Results deviated grossly from standardised norms. The expected percentage for the combined categories Very Weak and Weak is, for instance, 31%; in this investigation, however, 73% of the testees fell in these two classes.

Chronologically older children generally performed better. A highly significant difference existed between testees under six years and those over six years.

This investigation indicated the need for better organised preschool education in rural areas in Ciskei. Proposals with substantial financial implications are:

- * Better training of para-professional staff by qualified staff.
- * Training of qualified staff to provide expertise in preschool education in Ciskei.
- * Provision of sufficient educational materials by Government subsidies and private sponsors.
- * Institution of bridge classes by the Ciskei Department of Education to promote school readiness.

Suggestions without financial implications include:

- * An investigation of regulations regarding entrance age for basic education. Only in exceptional cases should children under six be admitted.
- * Daily programmes in Educare Centres geared towards learning readiness without becoming academic.
- * An age limit of three years for admittance to Educare Centres. Very young children should be catered for separately.
- * Liaison between Sub A teachers and Educare staff.



TABLE OF CONTENTS

Abstract	(ii)
Table of Contents	(iv)
List of Tables	(ix)
List of Figures	(xi)
Preface	(xiii)
CHAPTER ONE : THE PROBLEM AND ITS SETTING	
* Statement of the Problem	1
* Purpose of the Study	3
* Hypotheses	3
* Definition of Terms	4
* Research Procedure	4
CHAPTER TWO : HISTORICAL BACKGROUND AND PHILOSOPHICAL JUSTIFICATION FOR NURSERY EDUCATION	
* The History of Early Education	
In Western Countries	
The Nature-Nurture Controversy	6
In South Africa	11
* Aims of Early Education	12
The Totality Approach	13
Future School Success	15
An Integrated Approach	16
African Preschool Education	17
* Play as a Means of Learning	19
The purpose of Play	19
Forms of Play.	21
CHAPTER THREE : PSYCHOLOGICAL JUSTIFICATION FOR EARLY EDUCATION SUPPORTED BY EMPIRICAL STUDIES	
* The Development of Intelligence Tests	24
The Mutability of Intelligence	25
* Environmental Deprivation	26
Effects of Deprivation	27
Effects of Deprivation on School Beginners	28
South African Examples	29
* The Value of Early Experience	30
The Critical Periods Theory	31
Value of Early Experience for Language Development	32
Gains in IQ Scores	32
Alleged Short Duration of IQ Gains	34
Improved Cognitive and General Attainment	35
Affective and Social Gains	35
Value at School Entry, for "Deprived" Children	36
The General Scholastic Task of Nursery Education	37
CHAPTER FOUR: THE IMPLEMENTATION OF PHILOSOPHICAL AND PSYCHOLOGICAL IDEAS CONCERNING EARLY EDUCATION	
* Sociological Influences supporting Early Education	40
* The Concept of School Readiness gains Importance	41
* Increased Provision of Early Education	42
* Two broad approaches: The Behaviourist and the Phenomenological Approach	43

Models Emerging from different Approaches	44
Different Typologies compared	45
* Description of some Models for Nursery Education	
Skill-oriented approaches	46
Child-oriented approaches	48
* Effects of a more Structured Programme on Disadvantaged Children	51
* Criteria for Effective Early Education Programmes	52
The Physical Lay-out and Equipment	54
Health Aspects and Control	54
Staffing	55
The Role of the Community	55
CHAPTER FIVE : IMPLEMENTATION OF EARLY CHILDHOOD EDUCATION IN SOUTH AFRICA	
* First Phase: No Recognition as part of the Educational System	57
Initial Attempts to provide Early Education	58
The Nursery School Association of South Africa	59
Decline after initial Growth	59
* Second Phase: Partial Recognition in the Educational System	60
State Provision of Nursery Education in South Africa	60
General Principles for the Provision of Preschool Education	61
* Important Reports regarding Preschool Education	63
The Bridging Year	63
Need for State Support for Community Development	65
State Provision by the Department of Education and Training	66
* Control: divided among a Variety of Authorities	67
Private Initiative and Non-state Organisations	68
Community Involvement in Preschool work	70
* Training of Staff	72
Limited State Training for Blacks	72
Training of Para-professional Staff	73
* Health and Nutritional Aspects	75
CHAPTER SIX : SCHOOL READINESS	
* The Problem of School Readiness	77
* The concept 'Readiness'	78
* Aspects of School Readiness	
Physical Aspects	79
Intellectual Readiness and Perception	80
Language Development as an important Aspect	82
Social-emotional Aspects	83
Personality and Motivational Aspects	84
The Role of Learning	85
School Readiness related to the Demands of the School	85
* Chronological Age at School Entry	86
Entry Age related to the kind of Preschool Programme	88
Research Findings lead to Controversy	89
South African Research	91
Implications of the Research	93
* Determining School Readiness: the Use of Standardised Tests	93
Purpose of Readiness Tests	93

Kinds of Readiness Tests	94
A Few Examples of Measuring Instruments	94
Problems connected to Assessment	96
Specific South African Problems	97
South African Readiness Tests	98
* Readiness Programmes	103
Specific Needs of Disadvantaged Children	103
The Value of Home Programmes	104
Conventional Nursery School Programmes	106
Entry Class Programmes offered at Primary Schools	107
The Bridge Class	109
CHAPTER SEVEN : BACKGROUND INFORMATION ON THE CISKEI AND KEISKAMMAHOEK DISTRICT	
* General Information on Ciskei	
Geographical Position and Historical Background	111
Political Development	113
Demographic Aspects	114
Socio-economic Aspects:	
Educational Level of Population	118
Employment Opportunities	119
Health and Nutritional Problems	122
* General Information on the Keiskammahoek District	
Geographical position and Historical Background	124
Demographic Aspects	126
Socio-economic Aspects:	
Employment Opportunities	128
Health and Nutritional Problems	129
* School Education in Ciskei	
Historical-political Development	130
Problems encountered in the Educational Situation	131
Present Provision of Education	132
Teacher Training	134
Drop-out rates and Pupil Repetition	134
* School Education in Keiskammahoek	138
CHAPTER EIGHT: PRESCHOOL EDUCATION IN CISKEI WITH SPECIAL REFERENCE TO THE KEISKAMMAHOEK DISTRICT	
* Preschool Education as provided by the Government	141
Training of Staff	143
Visits to Departmental Preschools	145
* Private Initiative promotes Preschool Education	146
Educare Centres as an informal Approach	147
The Border Early Learning Centre	148
* The Beginning of organised Educare Work in the Keiskammahoek District	149
A Symposium on Preschool Work	151
Mfesane as Trustee for the Project	151
The Phambili Mawethu Community Development Project	152
* Other Rural Preschool Activities in Ciskei	
Educare Work in Hewu District	156
The Department of Rural Development as an Agent of expanding Preschool Activities in Ciskei	157
Financial support	160
Problems of Training Staff	160
Expansion of Educare Work in Ciskei	161

CHAPTER NINE: A FACTUAL DESCRIPTION OF EDUCARE WORK
IN THE KEISKAMMAHOEK DISTRICT

* Purpose of Empirical Research and Instruments used	163
* The Background of the Supervisors in Educare Centres	166
In-service Training of Staff	170
* Details of Educare Work in the Keiskammahoek District	
Accommodation for Educare Centres	171
Enrolment and Attendance at Educare Centres	172
The Problem of Equipping Educare Centres	174
Restricted Activities resulting from lack of Equipment	176
The Use of Materials and Frequency of Activities	181
Outline of Daily Programme	183
Content Analysis of Daily Programme	187
Appropriateness of Activities	189
Identification of Needs by the Supervisors	193
* Community Involvement in Educare Work	195
* Importance of Preschool Education:	
Parents' Views on the Value of Educare Work	196
Supervisors' judgement on Importance of Educare Work	198

CHAPTER TEN: BACKGROUND INFORMATION ABOUT A SAMPLE OF
CHILDREN ATTENDING EDUCARE CENTRES IN THE
KEISKAMMAHOEK DISTRICT

* The Sample	202
* Age Range of Children	203
* Residence in Keiskammahoek	203
* Educational Level of the Parents	205
* Employment Figures about Parents' Occupations	208
* The Socio-economic Standard of the Families	212
* Parental Absence from Home	214
* Family Life: some Statistics	216

CHAPTER ELEVEN: PRACTICAL INVESTIGATION DONE IN SUB A
CLASSES IN THE KEISKAMMAHOEK DISTRICT

* Motivation for Linking the Investigation to Schools and Instruments used	220
* The Situation in Sub A Classes	
Sub A Teachers' Professional Qualifications and Teaching Experience	222
Class Size	223
Sub A Pupils' Age	224
* Sub A Teachers' Perceptions of School Beginners	
Problems of School Beginners	225
Reasons for Failing Sub A	226
Subjective Assessment of Educare Children's Adjustment in Sub A	227
Suggestions for Preparing Pupils for Formal School	227
* Objective Assessment of Sub A Pupils' Abilities	
Selection of Test Instrument	229
Description of the Aptitude Test for School Beginners (ASB) and of the Abbreviated ASB	230
Scoring the Test	232
Standardisation, Reliability and Validity of the ASB	233
Matching Procedures for establishing the Experimental and Control Groups	234

Problems experienced during the Administration of the Test	237
Testing for Differences between Cross-matched Schools	237
Administration of the Test Instrument	238
Problems of Testees in Identifying Test Items	240
* Findings of the Analysis of Results on the ASB	
Scores of All tested Sub A Pupils, disregarding attendance of Educare Centres	243
Possible Reasons for Poor Results	246
Comparison between Experimental and Control Groups	249
Tests of Significance for Differences between Groups	252
t-test Results	253
Chi-squared Results	254
Conclusions about Results of Matched Testees	254
* Age as a Factor at School Entry	255
Comparison between School Beginners under Six Years and over Six Years at School Entry	256
Comparison among Three Age Groups of School beginners	261
Comparison within the Approved Sample	262
Comparison between Experimental and Control Groups	263
* Subjective Assessment by Sub A Teachers of Testees' Social-emotional behaviour	265
Conclusions about Social-emotional Behaviour	265
CHAPTER TWELVE: CONCLUSION AND RECOMMENDATIONS	
* Conclusion	267
* Recommendations	270
APPENDICES	
A Supervisors' Suitability Questionnaire	272
B Observation Task for Supervisors	275
C Phambili Mawethu Preschools	276
D Constitution of the Phambili Mawethu Project	277
E Telex to RSA Embassy	280
F Operation Hunger Food List	281
G Questionnaire for Supervisors of Educare Centres	282
H Check List for Equipment	285
I Questionnaire to Obtain Background Information on Children Attending Educare Centres	286
J Questionnaire for Teachers of Sub A Classes	287
K Scale for Social-Emotional Behaviour of School Beginner	289
L Raw Data : Results for Abbreviated ASB and Test 6	290
M Raw Data : Scores for Social-Emotional rating scale	292
N Photographs of Educare Work in Keiskammahoek District	
Buildings used for Educare Centres	295
Activities at Educare Centres	300
Staff of Educare Centres	306
LIST OF REFERENCES	307
OTHER WORKS CONSULTED	323

LIST OF TABLES

Table	Page
4: 1 Models for Nursery School Education	45
5: 1 Provision of Preschool Services in South Africa	68
7: 1 Growth in Ciskei Population	116
7: 2 Age Categories for Ciskeian Population	118
7: 3 Educational Qualifications in a Sample of Ciskeian Homes	119
7: 4 Age Categories for Population in Keiskammahoek	126
7: 5 Employment Figures for Keiskammahoek District	128
7: 6 Educational Provision in Ciskei	132
7: 7 Number of Candidates for Teacher Training	134
7: 8 Pupil Repetition in Ciskei	135
7: 9 Class Size and Pupil Repetition	136
7:10 Pupil Outflow and Enrolment in Ciskei (1985)	136
7:11 Pupil Enrolment in Keiskammahoek District (1984)	140
8: 1 Growth of Government Preschools in Ciskei:1985-1987	143
8: 2 Qualifications of Teachers in Preprimary Schools (1985)	144
8: 3 Enrolment at Educare Centres of the Department of Rural Development	161
9: 1 Age Distribution of Supervisors in Educare Centres	166
9: 2 Educational Level of Supervisors	166
9: 3 Further Training of Supervisors	167
9: 4 Language Command as reported by Supervisors	167
9: 5 Previous Occupations of Supervisors	168
9: 6 Motivation for Applying for Supervisor Post	169
9: 7 The Housing of Educare Centres	172
9: 8 Enrolment in 52 Educare Centres	172
9: 9 Cumulative Frequencies: Age of Educare Children	173
9:10 Equipment Claimed to be present in Educare Centres	175
9:11 Availability of Equipment in 50 Educare Centres	178
9:12 Frequency of Use of Equipment and of Activities	182
9:13 Frequency of Activities clustered in Developmental Areas	184
9:14.1 Broad Outline of Daily Timetable	185
9:14.2 Timetable without Directed Activities	185
9:14.3 Unstructured Timetable	185
9:14.4 Better Structured Timetable	186
9:15 Components of Daily Programme	187
9:16 Needs Expressed by Supervisors	193
9:17 Parents' Views on Value of Educare	197
9:18 Supervisors' Views on Value of Educare	198
9:19 Comparison between Supervisors' and Parents' Views on Value of Educare	199
10: 1 Age Range of Children in Educare Centres	203
10: 2 Years of Residence of Parents in Keiskammahoek District	205
10: 3 Educational Level of Parents of Educare Children	207
10: 4 Occupations of Fathers of Educare Children	208
10: 5 Occupations of Mothers of Educare Children	210
10: 6 Socio-economic Standard as Reflected by Articles Found in the Homes of Educare Children	212
10: 7 Extent of Parents' Absence	216

10: 8	Total Number of Children in the Family	216
10: 9	Birth Order in a Sample of Educare Children	216
10:10	Number of People who normally sleep in the Home every night	218
10:11	Church Denomination of Parents of a Sample of Educare Children	219
11: 1	Professional Qualifications of Sub A Teachers in the Keiskammahoek District	222
11: 2	Sub A Teachers' Total Teaching Experience	222
11: 3	Teachers' Experience in Sub A Classes	223
11: 4	Pupils' Ages in Sub A in Keiskammahoek District	224
11: 5	Teachers' Estimates for Appropriate School Entry Age	225
11: 6	Teachers' Views on Reasons for Failure in Sub A	226
11: 7	Reported Differences in Favour of Educare Children	227
11: 8	Table of Norms for Xhosa-speaking School Beginners	232
11: 9	Staves for the Abbreviated Battery of the ASB (Xhosa)	232
11:10	Standard Errors of Measurement for the ASB	234
11:11	Results of t-tests in Cross-matched Schools	237
11:12	Oral Identification by Some Sub A Pupils of Test Items: Tests 3 and 4 (ASB)	241
11:13	Frequency Table of Raw Scores for All Testees	243
11:14	Distribution of Results in Staves for All Testees	246
11:15	Raw Score of Experimental and Control Groups	249
11:16	Staves Obtained by Experimental and Control Groups	252
11:17	Chi-squared Test for Difference between Experimental and Control Groups: Abbreviated ASB	254
11:18	Chi-squared Test for Difference between Experimental and Control Groups: Test 6	254
11:19	Distribution of Raw Scores of School Beginners in Two Age groups	256
11:20	Distribution in Staves of School Beginners in Two Age Groups	256
11:21	t-Test Results for the Difference in Means of Two Age Groups of School Beginners	257
11:22	t-Test Results for the Difference in Means of Three Age Groups of School Beginners on the ASB test	261
11:23	t-Test Results for the Difference in Means of Three Age Groups of School Beginners on Test 6	261
11:24	Distribution for Chi-squared Test in Two Age Groups of School Beginners	262
11:25	Distribution of Abbreviated ASB Results for Chi-squared test in Two Age Groups within the Matched Pairs	263
11:26	Distribution in Staves within the Experimental and Control Groups on the Abbreviated ASB: 62-72 months	264
11:27	Distribution in Staves within the Experimental and Control Groups on the Abbreviated ASB: 73 months +	264

LIST OF FIGURES

Figure		Page
Fig 1	Pre-basic education: the bridging period as preparation for basic education	64
Fig 2	Locality diagram of study area in relation to surrounding states	112
Fig 3	Magisterial districts of Ciskei	115
Fig 4	Educational situation in Ciskei, 1983. Comparison of educational level of "fathers" and "mothers"	120
Fig 5	Keiskammahoek and environs: nearest towns, roads and railway line	125
Fig 6	Community Services in the Keiskammahoek District	127
Fig 7	Ciskei educational institutions	133
Fig 8	Ciskei educational institutions in the Mathole Circuit	139
Fig 9	Educare Centres and Primary schools visited in the Keiskammahoek District	165
Fig 10	Distribution in age groups: boys and girls in Educare Centres, Keiskammahoek, July 1986	204
Fig 11	Educational situation of parents of a sample of children in Educare Centres, Keiskammahoek, July 1986	206
Fig 12	Occupations of fathers of a sample of children in Educare Centres, Keiskammahoek, July 1986	209
Fig 13	Occupations of mothers of a sample of children in Educare Centres, Keiskammahoek, July 1986	211
Fig 14	Indication of the socio-economic standard of a sample of children in Educare Centres, Keiskammahoek, July 1986	213
Fig 15	Absence from home of the parents of children in Educare Centres, Keiskammahoek, July 1986	215
Fig 16	Family size and position of child in a sample of children in Educare Centres, Keiskammahoek, July 1986	217
Fig 17	ASB results of all tested Sub A's: frequencies of raw scores (Abbreviated ASB), Keiskammahoek, February 1987	244
Fig 18	Test 6 results of all tested Sub A's: frequencies of raw scores, Keiskammahoek, February 1987	245
Fig 19	ASB results of all tested Sub A's compared with the norm (in staves), Keiskammahoek, February 1987	247
Fig 20	Test 6 results of all tested Sub A's compared with the norm (in staves), Keiskammahoek, February 1987	248

Fig 21	ASB results of matched testees: raw score: Experimental and Control groups (Abbreviated ASB), Keiskammahoek, February 1987	250
Fig 22	Test 6 results of matched testees: raw score: Experimental and Control groups, Keiskammahoek, February 1987	251
Fig 23	ASB results of school beginners: age groups compared with the norm (in staves), Keiskammahoek, February 1987	258
Fig 24	Test 6 results of school beginners: age groups compared with the norm (in staves), Keiskammahoek, February 1987	259
Fig 25	Test 6 results of school beginners 73 months and over compared with the norm (in staves), Keiskammahoek, February 1987	260

PREFACE

I would like to express my sincere appreciation to the people who assisted me in carrying out this investigation. In his very busy programme Prof R Tunmer, as my supervisor, had to make time to give me guidance and to share his valuable insights with me.

The problems a non-resident student experiences in obtaining library books, were met by the friendly help of the librarians of the Fort Hare University and the Kaffrarian Museum, King William's Town, through the inter-library loan service.

The assistance of the staff of Phambili Mawethu was always rendered with so much enthusiasm that activities on the hottest of hot days were still pleasant. The dedication of Eirene Camagu, the project co-ordinator, interpreter and sub-tester was deeply appreciated.

From the officials of the Ciskei Department of Education excellent co-operation in connection with the field work was experienced. The principals of Lower Primary Schools and Primary Schools in the Mathole Circuit went out of their way to give assistance, as did the teachers of the Sub A classes involved. The pupils who so willingly took part in the tests, will not be forgotten.

The financial assistance of the Commission for Administration and of the Human Sciences Research Council towards this research is hereby gratefully acknowledged. Opinions expressed in this dissertation, or conclusions arrived at, are those of the author and are not to be attributed to the Human Sciences Research Council.

CHAPTER ONE

THE PROBLEM AND ITS SETTING

The nature of early environmental stimulation is the most important factor in the subsequent scholastic performance of children, in the opinion of many educationists. In a first world family the child normally experiences a richness of environmental stimuli right from his birth.

In South Africa the organised education of the four to six year age group in preschools, has so far largely been limited to the white population and to a small number of black, Indian and coloured children, usually in urban areas.

Children may experience varying degrees of shock when entering school. Discontinuity with previous experience may arise in the setting, the curriculum and the people he encounters (Cleave 1982 p165). The curriculum ties the child to a programme of set times for specific tasks and the programme/teacher distinguishes deliberately between work and play. The school day comprises long hours with less gross motor activity and more literacy and numeracy activities, leaving the child no choice of activity. He may be overwhelmed by the large numbers of pupils, especially those older and bigger than himself. He has to share the adult present with many others and await his turn, or not get an opportunity for individual conversation at all. Being addressed as one of a group and not as an individual poses problems for some. Movement and interaction with friends are restricted in the classroom set-up. The discontinuity he experiences may lead to bewilderment, shyness, distress, impatience or apathy (Cleave 1982). Achievement demands, conformity to group social codes and competition may cause stress for the child who already feels uneasy separated from home and family (Safford cited in Hay 1984). Acceptance of a new form of authority that expects uniform behaviour aimed at "work" instead of play, is not easy for all children (Jooste 1976 p99).

The dilemma of discontinuity is more severe for children in developing countries where foreign systems of learning impose upon the indigenous culture and the child experiences disparity between home life and school life (Duminy 1973 p55). There is often no continuity between the educative process from home to school as in more developed countries (Ferron 1981 p4). For such children the process of entering and adapting to school life is very hard.

The child born into a third world family, must also adapt to first world ideas and standards. He has, therefore, a more complex problem than his first world counterpart and with fewer opportunities available for him to prepare for formal entry into school. Apart from lack of environmental stimuli he often suffers other forms of social deprivation of which parent deprivation is most serious. Many fathers leave the rural home to work in urban areas and mothers leave the home for the whole day, week or month to work in nearby towns, leaving the young children in the care of grandparents or older siblings.

For all children who have not reached the necessary developmental levels the execution of tasks beyond their ability will be a frustrating experience. Gouws (1977) analysed syllabuses for the first grade and found that the premise was that children have already passed into the stage of concrete operations. Abilities of conservation, number concepts and differentiation were needed for arithmetic and classification, and for inductive and deductive reasoning expected in environmental studies. The habit of sending children to school at a very young age to procure care for them while parents work, can have an adverse effect on the progress of many school beginners, as they might not have reached the required stage of cognitive development.

Nursery schools are designed to help the child to adjust better to school because he has been a member of a group and knows that his freedom at times must be restricted. The shock of entering school where work has to be done, is to an extent lessened by his experience at nursery school; preparatory exercises and readiness programmes facilitate more formal learning.

In Ciskei drop-out rates in Sub A are high. It was estimated that 11 500 of the 44 515 Sub A pupils, i.e. 25%, would leave school in 1985 as

illiterates without having passed Sub A (Carstens et al 1985). These drop-out rates might be counteracted by meaningful preschool experience.

The community involvement in a preschool project in the rural area of Keiskammahoek arrested the attention of the researcher. Was it not possible to provide low-cost preschool education for rural communities in such a way as to prevent frustration and failure at school entry?

The purpose of this study was to supply an overview of existing systems of preschool provision in first world countries with its emphasis on school readiness, and to compare this with a third world situation. The establishment of Educare Centres (preschools) for a Ciskeian rural area serves as example. Background information of a sample of children from Educare Centres and of their teachers is presented. Daily activities are described and problems regarding training of teachers in the development of such preschool education are assessed.

This study was consequently carried out with the further purpose of investigating the role of preschools or Educare Centres in overcoming some of the difficulties already mentioned, and establishing a better degree of school readiness for the rural Ciskeian child. The Keiskammahoek project might prove that a reasonable degree of school readiness could be obtained even though financial sources were limited and qualified teachers not readily available. This experience could serve as a model for other developing rural areas.

A further problem that would be addressed, was the presence of very young pupils in Sub A. Meaningful provision of preschool care could counteract the tendency of sending children who are chronologically and mostly also mentally too young, into a formal school situation.

Hypotheses to be tested were the following:

1. Null hypothesis: School beginners in the Keiskammahoek District who attended Educare Centres will not perform better on an objective test instrument than school beginners without any form of preschool education.
2. Null hypothesis: School beginners who are over six will not perform better on an objective test instrument than school beginners who are under six at school entry.

3. Null hypothesis: School beginners who attended Educare Centres will not perform better on a subjective rating scale for social-emotional adjustment in Sub A than school beginners without any form of preschool education.

As the basis of the practical work done in this investigation, is that of rural preschool education in Educare Centres, these terms need to be defined for use in this study. Rural areas are those areas in the Ciskei outside the urban complexes of Mdantsane, Zwelitsha, Dimbaza, Alice and Bisho. The Ciskeian population outside urban areas is scattered in about 500 traditional villages (iilali) or in resettlement areas.

Preschool Education refers to education that comes before formal schooling; it is non-formal and has a more affective and less academic character (Lehobye 1978). Children from three years to schoolgoing age are normally included in this category. In the research it was found that children under two years of age were also accepted at some centres. Parents who do not have the time, facilities and knowledge to prepare their children in a purposeful way for life and in a more particular way for school entry, are assisted in aspects of care and education of the child before he goes to school. It aims at the harmonious development of the preschool child as far as his spiritual, physical and intellectual well-being, and his social, aesthetic, moral and religious growth is concerned.

Educare Centre is a fairly new term coined in the 1980's to reflect the combination of education and care and is used for centres that are not registered as preprimary schools but follow some form of educational programme.

In order to present a comprehensive view of the topic under discussion, the research procedure includes a literature survey on preschool structures in first and third world situations and on the question of school readiness. It includes interviews with people who have been involved in establishing rural preschool institutions and entails the drawing up of questionnaires to obtain information about the supervisors of Educare Centres, the organisation of the Educare Centres, the background of a sample of children attending the Educare Centres, the views of teachers of Sub A pupils on the value of Educare work and problems experienced in the Sub A classrooms. Personal visits to

Educare Centres supplemented the information obtained in this way. Finally, an objective test instrument, the Aptitude Test for School Beginners (ASB) is applied to a sample of school beginners and a statistical analysis of results is carried out. The social-emotional adjustment of school beginners is rated on a 5 point rating scale.

The information is organised in the following chapters:

1. The problem and its setting
2. Historical background and philosophical justification for nursery education
3. Psychological justification for early education supported by empirical studies
4. The implementation of philosophical and psychological ideas concerning early education
5. The implementation of early education in South Africa
6. School readiness
7. Background information on the Ciskei and Keiskammahoek District
8. Preschool education in Ciskei with special reference to the Keiskammahoek District
9. A factual description of Educare in the Keiskammahoek District
10. Background Information about a sample of children attending Educare Centres in the Keiskammahoek District
11. Practical investigation done in Sub A classes in the Keiskammahoek District
12. Conclusion and recommendations.

In line with this exposition we now turn our attention to the historical background of nursery education as well as to the philosophical justification for such education.

CHAPTER TWO

HISTORICAL BACKGROUND AND PHILOSOPHICAL JUSTIFICATION
FOR NURSERY EDUCATION

Although the history of early childhood education in western countries dates back to the ideas of the ancient Greek philosophers, in the third world the advantages of preschool education began to be considered only in the present century.

Through the ages voices in the western world had stressed the importance of early childhood education. Plato, as early as 400 BC, had advocated nursery care centres as part of the Ideal State (King 1983). Martin Luther (1483 - 1546) claimed that the state should be responsible for provision of education of young children. John Amos Comenius (1594 - 1670) advocated early education because the child was more receptive then and he stressed the importance of perception, language and thought processes in early learning. He wanted the child to enjoy what he was learning and believed that the child was basically good (Lehobye 1978). Morrison (cited in King 1983) shows that twentieth century ideas of Montessori and Piaget can be traced back to the mid-seventeenth century in Comenius' theories that the child should only learn what he is ready for and that concrete experience is the best way of learning. John Locke (1632 - 1704) realised the effect of the quality of daily experiences in the life of the child and advised all educators to plan according to the child's own interests and capabilities (Braun and Edward cited in Lehobye 1978).

It can be claimed, however, that the writings of Jean Jacques Rousseau (1712 - 1778) were the direct influences which began the application of theories of the importance of preschool experiences to organised schooling. He devoted a separate and major section of *Emile* to the education of *Emile's* first five years of life, because he viewed this period as an independent phase of life which was very important for learning experiences and which had a value and a significance independent of later development. The child was not a miniature adult, but had to be educated in accordance with his own nature. Free, natural

and spontaneous development should take place while the child is allowed to discover and learn for himself (Power 1970). Morrison (cited in King 1983) sees Rousseau as representing the dividing line between historical and modern education.

Rousseau himself did not put any of his ideas into practice. A follower of his, **Johann Pestalozzi** (1746 - 1827), can be regarded as the father of the Kindergarten movement. His work started among poor orphans in Switzerland. He recognised the importance of the home and family life. Given appropriate guidance, mothers are the best educators in the first few years of life. His concern was to provide that guidance when circumstances prevented the mother's influence from operating. He also stressed sensory experience in learning as Comenius had done in the seventeenth century and as Montessori and Piaget were to do later in the twentieth century. He advocated that learning must take place at the "psychological moment" when the child is ready for it (Rusk 1952 p186). Education should be child-centred and individualised with experience of actual objects as the basic point of departure (p205). He considered Number, Form and Language as the three pillars of education and children were to be taught to distinguish (1) objects as separate units and as related to other objects, (2) size and proportion of objects and (3) words to describe the objects (Pollard 1956 p35). Many of his ideas are still operative in nursery education.

Another follower of Rousseau, **Johann Frederic Oberlin** (1740 - 1826), is seen by many researchers as the originator of nursery schools (Grobler 1972). His first nursery school was started in his parish home in Waldbach, France in 1769 and served as a partial model for later English and Scottish Infant Schools. He started infant schools in all the villages under his pastoral care because he was convinced that children could be taught at an early age to distinguish between right and wrong. He put the young children, while their parents were at work, under the care of affectionate women, whom he salaried at his own expense. Instruction and discipline were well balanced with amusement and liberty and together with a variety of activities, such as handicraft, songs, explanations of pictures and maps, the children were well prepared to enter the public schools when they were old enough (Rusk 1933 p111).

Frederich Wilhelm Froebel (1782 - 1852) was attached to one of Pestalozzi's schools in Yverdun for two years. In 1837 he started his

first Kindergarten; in 1840 he opened the Universal German Kindergarten and devoted himself for the next twelve years to the cause of organised preschool education (Power 1970). He was especially concerned about the city children both of whose parents were at work and his commitment to this cause motivated many more educationists to take an interest in nursery education. Play was a very important item on the daily programme. In his book, "The Education of Man", he explains the use of what he calls the "gifts" and "occupations" in his system of education. Gifts were 13 kinds of instructional material like spheres, cylinders, cubes, squares and triangles that children were encouraged to handle freely. Occupations included 11 activities like painting, drawing, weaving, cutting and folding or singing, intended to ensure all-round development (Ferron 1981) and to allow for creative expression by construction and production (Cohen and Rudolph 1977 p4). The acquisition of good habits, skills and character was of greater importance than knowledge itself. The child encounters the world in a playful manner; he also needs to be brought into direct contact with nature and come to unity with God (Power 1970 p514).

In Scotland and England Robert Owen (1771-1858) played a leading role in establishing Infant Schools, the first of which was in New Lanark in 1816. He believed that by manipulating the environment, society could be improved, especially through education, and the problems of industrialisation overcome (Lawson and Silver 1973). He instructed the two teachers of the first school, James Buchanan and Molly Young, never to beat a child and never to use books, but to teach qualities of the natural things around them. Buchanan created a happy atmosphere in his school and became the master of the new infant school that was started in London in 1819, where he worked for the next 20 years. His work inspired Samuel Wilderspin, who started a third school in 1820 and contributed extensively to the nationwide promotion of the system as energetic superintendent of the London Infant Society, founded in 1824 (Adamson 1919). Likewise David Stow, in Scotland, propagated the importance of the preschool stage of development as all-important for the later life of the child. The Glasgow Infant School Society was founded in this country in 1827 (Rusk 1933). Buchanan's plans to start infant schools in New Zealand were interrupted when he decided to stay in Cape Town with his eldest son (Rusk 1933).

In the USA German immigrants popularised Froebel's ideas about kindergarten education. A student of Froebel, Mrs Carl Schurz, started the first kindergarten in 1856. This was conducted in German and by 1870 there were less than a dozen such German medium kindergartens. Elizabeth Peabody was attracted to the idea of this kind of early education and opened an English medium kindergarten in 1860 (Cohen and Rudolph 1977 p4). She widely propagated the ideas of Froebel so that by 1880 there were 400 such schools for preschool children. Henry Barnard, the USA Commissioner of Education, played an active role in advertising the idea of preschool education in *The American Journal of Education*, of which he was the editor, and a kindergarten was established in the public school system of St Louis in 1873 (Power 1970 p515).

From the late eighteenth century nursery education was emerging as a need in the educational field. It did not become a priority or even an important facet of education for a long time. During the nineteenth century we have seen the importance of Froebel and his followers. Many of the pioneers worked with children in deprived circumstances: Pestalozzi, Froebel, Owen and others committed themselves to this cause.

Educational theory and practice at the end of the nineteenth century was characterised by compulsory primary education in advanced countries; the emphasis on this issue precluded serious thought of preprimary provision. Twentieth century educational theory was interested in the possibility of extending compulsory education to the secondary level. Gradually the realisation of the need to improve educational equality of opportunity became stronger; children from deprived circumstances could, however, not benefit from schooling as was expected and advocates of preschool education propagated their views on this. There was also a growing awareness of the influence of sociological factors like large families, unemployment of fathers and poverty, on attainment levels in schools. Burt, a psychologist appointed to investigate the situation in London, produced valuable information on backwardness, which added to the conviction that these children needed help (Peel 1960).

Different movements in America, England, France, Sweden and Germany started showing more and more interest in child development theories.

Examples of increased interest in the child and his total development were the first International Congress of Child Psychology held in France in 1909 and the creation of the USA Children's Bureau in 1912 (Austin cited in King 1983). Initially its main purpose was the protection and care of children in disadvantaged circumstances and only later did the educational aspect become important. Unfortunately because such education was largely provided by private institutions, the poor were virtually excluded.

In reaction to the strict discipline that existed at the time in Infant schools in England, the MacMillan sisters established English Nursery Schools (Durkin 1972 p5). Their first school was erected in 1912 in a slum area in London.

Widespread influence through books and through specific training for preschool work emanated from the Italian **Maria Montessori** (1870-1952). She developed "Houses of Childhood": the principles underlying her work were respect for children, individualised education, self-initiated activity, optimum learning during sensitive periods, independence in a prepared environment and auto-education based on the principle of individual liberty for the pupil to choose activities appealing to him (King 1983). She used a formal way of separate training of sensory, motor and intellectual capacities leading to mastery of reading, writing and arithmetic (Montessori 1912). Children used specially designed apparatus like the Pink Tower, Brown Stairs, Red Rods and Triangular cards (Gettman 1987). The child's cultural development was also considered important; in history, geography and nature study lessons children were made aware of their environment and its meaning for them (Gettman 1987). Her work is generally acclaimed for many fundamental ideas about education: the material is adapted for children, attention is given to individual differences, discipline is based on love and interest, a personal bond is established with the pupil, pupils are classified according to ability, education is seen as fun, the mind and the body are being developed and moral growth is emphasised.

An important issue that emerged and was considered by twentieth century personalities mentioned so far, was that of teacher training. There was a growing realisation that the methods of handling the preschool child differed from that of handling the primary school child.

From the mass of psychological theories in the first half of the twentieth century about child development and its relationship to schooling two conflicting theories about child development emerged that influenced the development of nursery education. The nature-nurture controversy divided educational psychologists into those who were champions of heredity as the sole determinant of intelligence and achievement, as opposed to those who claimed that the environmental stimuli and surroundings were of greater influence.

For the first group gentle and informal stimulation through the total preschool environment of free play and free expression was an appropriate approach. The opposing view emphasised the influence of an enriched environment and went a long way to stimulate more interest in nursery education.

A third viewpoint, that of the interactionists, stressed the importance of environmental influences interacting with genetic attributes (Kohlberg 1968). Nursery education as compensation is dependent on some of these psychological theories, about which more will be said in chapter three.

Reilly (1983) suggests that Hunt's writings were of crucial importance in the renewed interest in early childhood education in the last two decades. If intelligence was not fixed at birth but could be affected qualitatively by the encounter with his environment; if development was not predetermined; if mental functioning was influenced by experience and problem solving; if the total development of the child could be influenced by early experience; if the child played an active role in learning, then surely early childhood education was important. Hunt's research in the 60's on Intelligence and Experience, and Benjamin Bloom's, Stability and Change in Human Characteristics (1964) (cited in Reilly 1983) contributed significantly towards the new preschool movement. The importance of nursery education was now viewed from a more specifically scientific and psychological perspective instead of a largely philosophical one. There exists, however, an interrelationship between philosophical approaches and psychological theories. They continuously interact. As a psychological theory changes, so the philosophy changes; as awareness of a problem changes, psychologists provide new approaches. Developmental theories and preschool practice interact and it is difficult to separate them. One way is to use an

artificial division as the author has done and to look at the origins and purposes of the preschool movement first and then consider the psychological theories which underlie this. More attention will be given to the psychology and measurement schools in a subsequent chapter.

The history of nursery education in South Africa is largely limited to the past 57 years. When compared to the early prominence given in countries like the United Kingdom and the USA to preschool education, pre-basic education in South Africa is still in its infancy. As early as 1829 there was a school for preschool children at the Cape with William Buchanan, a son of James Buchanan (the first teacher in Robert Owen's Infant School in Scotland) at the head. It catered for the children of slaves and in 1833 a school was started for white children also (Grobler 1972). These seem to be isolated examples. Very little is known of more attempts at organised early education; the socio-economic conditions in big cities like Johannesburg eventually brought the plight of the young child to the front in the 1900's (Grobler 1972).

When Dr Ruth Arndt arrived in the country from America in 1926, she strongly propagated the idea of nursery education. The Nursery School Movement in South Africa started in the 1930's. The National Council for Women played a part in sponsoring a nursery health class. Public speeches and magazine articles focused attention on needs of young children (Webber 1978). This eventually led to the foundation of three training colleges for teachers of white preschool children, but despite the hopes of the founders of the movement the schools which were started were almost exclusively for middle class white children whose parents could afford the fees. Very few examples could be found of such schools being set up in poorer halves of cities and there were virtually no examples of such schools for children of other racial groups. The programmes in such schools followed the same broad informal education approaches already briefly mentioned and will be explained further in Chapter 5. As Reilly has shown, however, greater state interest in the provision of preprimary education for less privileged children has emerged in the last two decades of the 60's and 80's. In white education state aid for nursery schools became more freely available and teacher training was extended to many white provincial colleges. Many municipalities provided nursery schools for black children in townships but there was a very serious lack of teacher

training for such institutions. By the decade of the 80's some of the independent and semi-independent homelands of South Africa had begun to recognise the need to provide some form of preschool education, for instance in Ciskei the International Year of the Child (1979) was the starting point for better organised preschool education. At that stage eight private institutions catered for 0,45% of the estimated number of children below the age of six. Half of the children provided for, were from the urban area of Mdantsane near East London. Rural preschool children were, however, still in desperate need of nursery education (Nicol 1980).

The practical implementation of the ideas connected with early education will receive attention in a separate section. To continue with the philosophical justification for early education, the aims of nursery education will be investigated.

Formulation of aims is important to serve as a guideline for deciding on programme particulars. Preschool education is seen by some as solely a preparation for formal schooling; by others as a foundation for lifelong learning and living. The 1961 Unesco survey indicates a spectrum of aims varying from general development programmes in England and Scotland, to linguistic development and promotion of reading and calculating readiness in Belgium (Lehobye 1978). Development of school readiness and development of the whole child form the two poles on a continuum of developmental aims. The first is often considered important in third world situations of deprivation whereas first world aims centre on a broad enrichment of experience, which indirectly fosters school readiness.

The approach that is concerned with the education of the whole child has as its goals the development of self-expression and creativity and the stimulation of initiative because the whole child must be involved in learning that is relevant for his present situation rather than for the future. School readiness becomes an incidental goal which is attained as a by-product of the experiences offered. Formative education in preschool years aims at a complete development of the whole child

(Oosthuizen 1971 p13). As a total life programme not only knowledge, but attitudes, values and positive feelings to build a happy society are imparted (Van Westende 1982 p294). The fact that the type of education offered in preschool years is designated in most countries of the world as *formative*, implies that it is a continuation of the broad moulding that supplements what they receive at home. Weber (1971) sees it as a support system of natural growth providing experience which is essential for learning. Children gain experience in an informal manner but are at the same time being prepared for formal instruction later on (Oosthuizen 1971 p21).

Le Roux (1980 p130) argues that education must develop from the disposition of the child and because he has physical, affective, normative, social and cognitive possibilities, these five categories also form the basis for formulating aims. These major areas are also identified by the Educational Policies Commission USA (Frost 1968 p6). Le Roux (1980 p137) argues that school readiness should not be seen as the goal but as the result of sound preprimary education. If a variety of opportunities are created for the child to experience real objects, he will be able to move from "concrete sensory-motor intelligence to representational intelligence" (Sonquist and Kamii in Frost 1986 p170). Conceptualisation follows without difficulty and without formal instruction. The immediate aim as stated by Reilly (cited in le Roux 1980 p48), is to provide the child with a rich and constructive present rather than looking to a distant future.

The traditional South African preprimary school aims at the totality of affective and cognitive needs: all personality aspects are to be developed in a socially stimulating situation. The child learns to be a member of a group not made up of family members and to submit to authority other than parental authority (Olivier 1976 p47). He gains socially. Anderson and Messick (cited in Garbers et al 1976 p37-42) describe the social competency to be reached by nursery school children: an established identity and self-image, an awareness of the ability to initiate things, self-care, a realistic self-image, a differentiation of emotions, sensitivity in social relations, warmth in personal relations, a role perception, control over anti-social behaviour, concern for others, an inquiring mind, control of direction and duration of attention, language skills, categorising skills, general knowledge about his

environment, ability motivation, an openness to use sources for information, positive attitudes towards learning and school, enjoyment of play and fantasy. The socialisation process includes personality development: "every child that develops a positive self-image and learns to function in social situations is a valuable addition to the educational scheme" (Hawkes in Frost 1968 p334-6).

It has already been suggested that readiness programmes in the preschool are based upon very different aims. **Future school success as primary goal** is designed to assist disadvantaged children optimally. This is demonstrated in the aims of some of the Operation Head Start programmes. This was a nationwide attempt to assist such children to gain some scholastic skills during an eight week summer programme in 1965 in the USA. Because of the wide scope, different programmes with different aims were designed. Some of the programmes followed the whole child approach already described but others, particularly those of short duration, concentrated on special preparation for the first year of school, for instance developing language competency; others as shown by Frost (1968 p277) had broad social goals like improving health, confidence, self-respect, dignity, peer relations and strengthening family ties. If, however, a programme was to be telescoped into eight short summer weeks before the opening of the school year, such broad and ill-defined aims were questioned.

Where future school success is the primary goal, the programme will be more structured and adult directed. Bereiter and Engelmann (1966) state certain minimum standards of academic attainment in their discussion of programmes that are intended to help disadvantaged American children to reach a level necessary for later school success. They are of opinion that other developmental areas can be catered for outside school because time is too precious to erase the lag in language, numerical and reading skills of disadvantaged children. Abilities to be mastered are specified precisely as described in Chapter 4.

These objectives call for deliberate teaching. In such a programme skills, attitudes and concepts that are needed in formal schooling should get first priority (Todd Risley in Stanley 1972) and this may be termed "survival training" because the child learns to sit still, listen to directions, pay attention, be on time and do something correct. Any

intervention programme for disadvantaged children operates on the basis that these children are behind in intellectual and learning tasks and the aim is to do away with this difference through compensatory education (Harry Beilin in Stanley 1972 p165).

Wein (1971) compared the education programmes for disadvantaged children in four countries: USA, Israel, China and Great Britain, and showed that four aims (perceptual development, conceptual development, language development and socialisation) occur frequently. The first three can be seen as preparation for formal schooling.

The White Paper, released by the SA Department of National Education in November 1983, narrows the objectives of preprimary education to preparation for formal education. Reilly (1983) argues, however, that the danger exists that the freedom for development is replaced with an emphasis on convergent thinking and conformity. In Fabian's Structured Preschool Programme (1985) which attempts to bridge the gap between preprimary and primary school, she mentions specific aims for each developmental area. For example, the language enrichment programme aims at vocabulary development, the imparting of factual knowledge, arousing curiosity and creating awareness of a variety of stimuli.

It is now necessary to examine briefly approaches which lie between the two extremes already described. A clear division between the two approaches is not always possible. All the qualities gained in the whole-child approach with its broad social basis are also aspects of school readiness. The same holds true for the integrated approach in which there is no stress on drilling or a rigid curriculum, but which yields capabilities desired for school readiness. Oralie Mc Afee (cited by Stanley 1972 p69) mentions five categories of objectives, namely increased sensory and perceptual acuity, language ability, conceptual ability, problem-solving and acquiring a positive self-concept. It can be argued that these five broad categories do not differ materially from many listed in the more structured programmes.

In support of this approach Almy (1975) holds that preschool education is education for development and that it should increase understanding of the environment and the ability to solve problems. Although there are no specified precise measurable objectives, it is aimed at "academic" skills. Grey (cited in le Roux 1980 p46) lists three aims: provision of

care, prevention of learning problems by early diagnosis and education. The last pedagogical aim is divided into an academic aim (school) that fosters motivation to learn and an intellectual aim (cognitive) that fosters solution of problems. It is clear that Grey also follows a middle-of-the-road approach by not restricting her aims to either one of the two broad approaches.

King (1983) follows the same approach and sees preschool education as having one or more of the following aims: it can be corrective, preventative or optimizing. Deprivation or learning disabilities may be corrected, poor achievement at school prevented, while the already stimulating home environment of another child may be supplemented.

When special programmes for third world countries are debated, a careful examination of these three differing approaches needs to be made. Formal school is a continuation of the educational process at home for most European children, but it is not so for children in developing countries (Ferron 1983 p14). African preschool education in developing countries is often, therefore, seen as compensatory and so is structured to precise objectives. In contrast to the early experiences at home the first-world child has had before school entry, the third-world child is seriously handicapped. He has not had the same opportunity to experiment with number and spatial concepts while playing with all kinds of "educational" toys and did not get the pre-reading exercises obtained from picture books and other stimulus material or from stories being read to him because of poor circumstances of illiterate or semi-literate parents who could not provide a stimulating environment (Ferron 1981 p4). Many opportunities should be provided to develop the imagination, e.g. by 'Let's pretend' play.

According to Bakara (1970) the purely socially-oriented approach, whereby children learn through free play, does not provide sufficient adult stimulation for African children's optimum learning. His research shows that five cognitive objectives could be set: provision of a variety of stimulation, development of attention skills by ensuring suitable orientating responses to stimuli, practice in perceptual and conceptual activities, provision of a model for the development of language, physical fitness and motor co-ordination. Specific preparation for reading, for instance, should be done through structured methods like those in the Bereiter & Englemann (1966) programme as described in

Chapter 4. To improve numerical ability, conservation of quantity should be taught and to assist later writing, physical and motor co-ordination should be fostered through games. These activities will promote learning in school, as will cultivation of listening, memory and attention skills through story telling and good model language usage.

The black school beginner in Southern Africa is faced with a western oriented scholastic curriculum which is based on the assumption that the child has achieved a certain "western" level of development. For the black child an important aim of early education should be to improve the various visual perception components so that he is better prepared for the learning situation in a western type of school. Steenekamp (1971) found that a sample of Bapedi, Tsonga and Venda children were a year behind average white children when a standardised test on visuo-motor readiness of school beginners was applied to them (p228).

Herbst (1986) researched perceptual problems of Sotho speaking pupils because perception is basic to learning. She analysed differences in perception between white and black people that derive from socio-cultural differences and found that the Sotho school beginner's kind of visual perception did not equip him well for the type of learning tasks that await him at school (p129). The two areas yielding the greatest significant differences between an experimental group, that was given play enrichment to develop visual perception abilities, and a control group, were those of foreground-background differentiation and visual-motor co-ordination. The activities mostly preferred by the children were creative cutting, constructing or painting. She has proved the value of using various western play stimulus material at an early stage to overcome the problem of visuo-motor unreadiness.

It could be argued that all preschool activities for African children - objectives, methods and content - should be closely connected with learning readiness. Learning readiness as regards personality should aim at developing achievement motivation, competence motivation and delaying gratification (Bakara 1970). Emotional security, respect for his individuality and self-expression help to minimise formation of inferiority complexes (Ferron n.d. p27). A strong plea has been made by Bakara (1970) for structured programmes with specific learning objectives, like the Bereiter-Engelmann model; because they support rote learning to a certain extent, Ferron (n.d. p21) pleads for a change

towards "think-for-yourself" to escape from the traditional methods of learning in African education.

One of the key techniques in all preschool education is the emphasis given to play, although this emphasis will vary between the two extreme programmes already mentioned. In nursery education which focuses on general development and is not solely skill oriented, learning takes place not by formal instruction, but by means of play. The value of play as a means of learning has been stressed by great educators through the ages. The conviction that play opportunities for young children is the primary need in every country, was expressed by the World Organisation for Early Childhood Education (Hartley 1971).

The names of De Montaigne, Comenius, Rousseau, Owen, Pestalozzi, Froebel, Montessori, McMillan and Dewey are all connected in some way to the idea of learning through play, sensory experience and free development respectively (Weber 1971 p170). Often this was in the face of regimented teaching when children were seen as miniature adults and denied any creative expression (Frost 1980). At times the new perspectives were lost. Riley (cited in King 1983) shows that play was regarded with suspicion by the Puritans because anything pleasurable was wrong. The twentieth century again saw many supporters of play of whom Maria Montessori was one. The detailed structured apparatus used in the Montessori programme has already been mentioned and it is important to note that even such programmes do not abandon the importance of play. The Plowden Report (1967) on primary education in England stated that it was the most important means of learning for young children. Through their play they learn to explore, experiment, feel, think, communicate, initiate, defend, co-operate and enjoy working alone and with others.

Although the purpose of play has been differently described by researchers, the broad functions of cognitive development, social-emotional-moral gains, physical and motor co-ordination, creativity and acquiring skills needed for formal schooling emerge again and again from the literature. The proponents of each of these purposes will be briefly listed.

Sours (1973 p139) mentions various authors who stress aspects of cognitive development like organisation of thought (Alexander), of speech (Lenneberg), and of symbolic function (Galenson). According to Tough (1980) cognitive values gained while the child plays are remembering, comparing and recognising. Hartley (1971) claims that the child discovers rules and relationships through exploration. Processes through which learning takes place and concepts needed for thinking are utilised during his play. These processes include identifying, differentiating, generalising, grouping, ordering, symbolising, reasoning and many more. The child needs to attend, perceive, remember and recognise. Relational concepts of cause, number, space, time, size and volume are acquired. Attitudes of trying out alternatives and experimenting lead to problem-solving skills.

The socialising function of play is important for Herbst (1986). It is expressed on different levels: in passive play the child watches others and plays in the company of others but on his own, or shares toys but plays independently; in associative play sharing takes place; in co-operative play task differentiation in groups takes place (Herbst 1986 p104). Olivier (1976) holds that the child practises in his play those attitudes and actions he will display in his relations with his adult fellow men one day; a simple thing like taking turns makes the child aware of the dignity of the other person. Through play he realises his limitations and possibilities; he can explore without fearing failure because he initiates his own situation; he gains self-confidence and experiences feelings of worth when he compares his efforts with those of children of his own age. Tough (1980) recognises social assets like sharing, consideration and co-operation. Play also facilitates the acquisition of values like courage, curiosity, self-acceptance and optimism (Hartley 1971).

The relief of tension through play has long been recognised by therapists. Expression of emotions and sublimation of drives through play is often mentioned by authors, e.g. by Peller (cited in Sours 1973), Garbers et al (1976) and Tough (1980). Kellmer-Pringle (1971 p251) regards play as the major psychological means for the child to understand the world and cope with emotions which can be expressed without harming others. Play involving fantasy makes it possible for the child to control his own world: his emotions and desires can be

expressed in the world he creates for himself; it is a safety valve for dealing with overwhelming experiences (Grey 1976 p73); it is a means of assertion, reducing fear and anxiety (Ferron 1983 p101).

There are many physical advantages derived from play, e.g. physical co-ordination, motor skills and accuracy are developed. Tough (1980) and Winnicot (cited in Sours 1973) are two of the many authors to emphasise this aspect, while Hurlock (cited in Herbst 1986) holds that creativity is stimulated by certain forms of play. A child should, therefore, be allowed ample opportunity for fantasy to stimulate creativity. King (1983 p115) sees an interrelatedness between language development, creativity, flexibility, fantasy, social skills and the ability to play.

Finally, play activities prepare the child for meeting formal school demands. Grey (1976) claims that a balance between physical and psychic development can be achieved through play. Concentration during play activities prepares the child for formal instruction in school when he has to accept work responsibility (p84). She supports Charlotte Bühler's suggestion that the child that occupies himself with constructive activities and purposefully completes it, has adopted an attitude of work as opposed to pure play and he is ready to accept instructions from other people and complete a task. Sonquist and Kamii (in Frost 1968 p178) regard socio-dramatic play as very suitable for incidental discovery, forced discovery and direct teaching. Duminy (cited in Lehobye 1978) ranks highly socio-dramatic play in which the child places himself in somebody else's place.

Authors differ in their classification of forms of play. Two forms of play between which a proper balance should be found in preschool education are distinguished by Almy (1975): self-initiated play and adult-prescribed play. The child's interest and imagination determine his activity in the former; intervention by an adult gives it specific meaning in the latter. Almy (1975) proceeds from the assumption that the nursery school is a specially prepared educational environment and that teachers had special training, therefore the setting should invite spontaneous play. Kuypers distinguishes four forms of play (Grey 1976 p62-70): functional play (sensori-motor activities); fantasy, imaginative and role play; constructive play; and receptive play which is less active (the child listens to a story or looks in a picture book).

Oosthuizen (1971 p8) subdivides experimental play into three levels: at first the child merely takes notice of objects and their qualities, then comes a realisation of the transformability of objects like sand, water and clay and this makes him more aware of the fact that he can shape and change things; after this level follows constructive play in which he sets himself a target and strives to accomplish it. As mentioned earlier, Charlotte Bühler (cited in Olivier 1976) saw this development of purposefulness, in which the result is as important as the action, as a sign of school readiness. Oosthuizen (1971) further distinguishes two forms of imitation, namely self-mimicry when the child is satisfied with his own efforts and repeats it, and imitation of others, which Olivier (1976) sees as an expression of more abstract thought.

In conclusion, it would seem that, for the total child approach, all aspects of development are affected by play experiences: physical co-ordination and muscular control is gained, emotions are expressed, intellectual gains are made, imagination and reality move closer together, social conduct is improved and self-confidence and a task attitude are established. It can be said that play contributes to the satisfaction of the needs of the developing child (Grey 1976). None of those who follow the more structured approach towards preschool education would reject play, but they would claim that more purposeful intervention is needed in the play activities of children who should not be left to their own devices without direction or provision of materials that could stimulate them. Blalock (1980) argues that the teacher should become the playleader providing background, advice, understanding, appreciation, confidence and praise without directing too much.

In effect, research by Udwin (1983) shows very positive results of an intervention programme of imaginative play training. The experimental group showed significant improvements in divergent thinking, fluency, originality, imagination, exhibiting a positive self-concept, interaction with peers and verbal fluency after a five week training programme in which they were encouraged to use their own ideas and fantasy. Institution children, in the experimental group (who are often deprived of parental or adult interest and stimulation), reached the same levels of imaginative play as a group of parent-reared middle class children when matched on age, sex and attendance at nursery school.

It has been shown in this chapter, that philosophical ideas and developmental theories underlie and justify specific approaches to nursery education. It has been suggested that philosophical theories continuously interact. In the next chapter psychological theories about the value and effect of early stimulation on intelligence and general attainment will be discussed with empirical evidence to substantiate this idea.

CHAPTER THREE

PSYCHOLOGICAL JUSTIFICATION FOR EARLY EDUCATION
SUPPORTED BY EMPIRICAL STUDIES

The positive effect of early stimulation on intelligence and general attainment claimed previously without any scientific proof, was to be supported later by objective evidence as the structure of the human mind was studied and tests for measuring intelligence were developed. Philosophers' subjective impressions were validated by objective evidence. In the late nineteenth century emphasis on a quantitative approach towards human thinking emerged with the development of intelligence tests. The French medical doctor, Alfred Binet, produced the first test for measurement and assessment of intelligence of mentally defective children with the help of Simon in 1901. A series of tests for measuring school children's intelligence was devised and published in France in 1905 as the Binet-Simon Scale. It was amended and revised by Terman and Merrill at the Stanford university in America in 1916. Another psychologist that worked in the same field was Burt, a British psychologist who published his mental and scholastic tests in 1921 (Peel 1960 p131). Wechsler, an American professor in psychology since 1942, also devised an individual intelligence scale for children (popularly known as WISC). Educational psychologists could now present a more scientific perspective on the value and importance of early learning experience when presenting evidence of the contribution of such stimulation to gains in IQ.

The individual tests that were in use, were not suitable when large numbers of people were to be tested as happened in 1917 when the USA entered the first world war and had to test many recruits quickly; the army alpha and betha group tests were developed to investigate qualities of intelligence and predicting aptitudes. Soon group tests were also used for grading school children (Peel 1960 p132). Group testing, however, although it popularised the testing of intelligence, has never really been used on preschool children because they are too young to react to group instructions. Wechsler published an individual preschool and primary school scale of intelligence in 1967 (Gouws et al 1981).

All these efforts are refining ways in assessing intelligence and trying to see what intelligence is and each one encourages further experiments with intelligence and its effects on ways children learn; the question was also asked if intelligence is fixed or adapted by the environment and from this question different views evolved. The two broad views that opposed one another, were that intelligence is fixed by heredity and only slightly influenced by the environment, and secondly that intelligence is much more susceptible to the environment and may be influenced by manipulating the environment. As mentioned in Chapter 2, the argument came to be known as the nature-nurture controversy and was addressed by different schools of thought. Maturational theorists like Freud and Gesell, stress the importance of heredity. Little influence is exerted by nursery education because the child's potential and abilities are already fixed by his genetic make-up.

A reaction was to be expected from the behaviouristic theorists. The importance attached to direct instruction for development was upheld by authorities like Thorndike and Skinner and is stressed in more recent writings of Bereiter and Engelmann (1966). A more controlled stimulus should produce a more predictable response - that is an output. Research mentioned by Getzels (1966) revealed a difference in the intelligence of working class and middle class children in the first grade and the question arose if varying environmental conditions modify natural endowment: the role of the environment gained importance and it was accepted by authorities that intelligence is variable as a result of environment.

Edwards (cited in Stein and Susser 1970), emphasises the mutability of intelligence. A changed environment may cause the relative contribution of heritable and environmental factors to change. In four surveys carried out in the 60's in Manchester the relation between environmental factors and educational attainment was studied. Although results point to a heavy genetic element, the effect of environment is upheld. Meade (1965) quotes research by Erlenmeyer-Kimling and Jarvik which shows a high correlation of children's and parents' intelligence, but they concede that intellectual ability is not fixed by genetic constitution. Environmental conditions determine the development of genetic abilities. Meade (1965) found that educational attainment is most influenced by environment in the preschool years, which are so important for the

development of the child and his self-regarding sentiment; the effect of environmental influences disappears by age 18.

The nature-nurture controversy entered a new stage with the additive approach in which nature PLUS nurture were accepted as contributing to development. Hebb (1949) proposed that a distinction should be made between intelligence A, which is inherited and not ever measured or observed because it always is in interaction with the environment, and intelligence B which is the observable intelligent behaviour of a person, the continuous interaction of environment and inherited intelligence which cannot be separated. Intelligence B varies with the kind of interaction with the environment that is available. The theory of cognitive development of Jean Piaget (1896-1980), and the consequent studies by Hunt and Bloom, entrenched the importance of the interaction between organism and stimulating environment (Kohlberg 1968). Strong emphasis was placed on the role of the environment in developing the human mind. It follows that a poor, unstimulating environment will likely limit intelligence B and result in poor response to schooling; if the environment could be manipulated and stimulation controlled, this could be improved, especially through early stimulation. Twentieth century theories reinforced the claims of historical figures like Rousseau, Pestalozzi, MacMillan and Montessori who asked for preschool intervention. Theories now had a quantitative base to them.

At this stage it is appropriate to pay more attention to the concept of environmental deprivation. Authors differ in the use of terminology and may refer to the environmentally deprived, the culturally deprived, the socially disadvantaged or the culturally handicapped. This does not mean that children in these categories have no cultural values, but according to first world standards they lack some characteristics that facilitate success in the formal western school system. They often exhibit better values than the 'privileged' class, for instance, cooperativeness (in contrast to competitiveness), concern for the extended family (in contrast to rivalry) and security (in contrast to anxiety) (Getzels 1966). Inadequate development of language, task orientation, value systems and physical aspects are often included under the label of environmental deprivation. Absence of imaginative powers, motivation for learning, ambition, and a prolonged attention span often derive from the kind of early education the child undergoes: he is often expected to

respect and obey his elders and keep quiet in their presence. All too often the growing child does not get the necessary nutritious food or intellectual stimulation (Kellmer-Pringle 1971 and White, cited in Lehobye 1978). Garbers et al (1976) include conditions like low economic status, a non-technological culture, an uneducative home environment and overcrowding in the concept of cultural deprivation.

In an African context Vaughan (1977) sees cultural deprivation as a lack of western school-directed development. The child must eventually exist in a western cultural world, but his own culture does not prepare him sufficiently. The term cultural "deprivation" should perhaps rather be replaced by cultural "difference" because children operate adequately in their own known environments but the demands of the school cause "handicaps". The traditional Pedi culture, for instance, does not prepare the child for abstract cognitive school learning. His traditional culture emphasises rituals, the supernatural, a collective responsibility and discipline by fear. There is an absence of that type of western intellectual stimulation and creativity needed for school. Obedience is valued above enterprise. Whereas individualisation is important in a western culture, the traditional Pedi child must conform in all ways. Similar findings were made by Vernon (cited in Vaughan 1977): African mothers in Uganda frustrate rather than encourage any curiosity in their children. The reasons for the unreadiness of black culturally differently brought up children mentioned by Bakara (1970), are the lack of educational tradition in the home, little time spent by parents to interact productively with their children, little development of cognitive skills or concepts through educational toys and a stereotyped style of communication.

The effects of deprivation have been found to be negatively correlated with desired levels of development. A study by Krugman (1956) shows that the social class an American child is born into affects all areas of his growth. The lower class child shows lags in physical growth (difference in weight and stature in the early years), mental abilities (10 - 20 IQ points difference), academic work (2 years behind in achievement tests) and in personality and adjustment (a large percentage leave school before the second year in high school). Social difficulties, emotional deprivation and cultural limitations all have a very negative effect on the child's adjustment at school. The fact that

his parents do not use the type of book learning he is busy with, diminishes the value and need for learning for the deprived child.

If the urge for knowing is not stimulated, interest and curiosity is lost (Kellmer-Pringle 1971). Wein's research (1971) on effects of deprivation in USA, Israel, China and Great Britain indicates that areas of language, conceptual and perceptual development are adversely affected.

Bereiter and Engelmann (1966 p41) who define cultural deprivation as "a lack of those particular kinds of learning that are important for success in school", single out language development and logical reasoning ability as areas mostly affected. The ability to manipulate symbols, which is so important for academic success, is lacking. It is not the capacity to learn, but actual learning that these children lack.

Environmental deprivation affects school beginners adversely. Cynthia Deutsch found that verbal, perceptual and attentional processes in disadvantaged children did not proceed optimally (Deutsch 1967); Martin Deutsch claims an adverse effect of "stimulus deprivation" and poverty on visual perception, verbal ability, attention, memory, task completion and problem solving (Deutsch 1967 p45). The child who has no experience with books, who seldom listens to lengthy verbal communications and lacks opportunities to develop fine visual perception is at a tremendous disadvantage; he is not well prepared for the demands of the school and the school on the other hand is not prepared for him so that he experiences great discontinuity between home and school (Deutsch in Hechinger 1966). In contrast, the child who was encouraged at home in his imaginary play, in communication of ideas, in representation when drawing or painting and in solving problems, develops the aptitude and interest needed to learn to read and write.

Since language development is basic for general intellectual development, children whose language development remains limited, especially during the critical preschool years, often suffer educational backwardness later (Kellmer-Pringle 1971). Limited linguistic skills have been noted in working class children by educationists and researchers (Bernstein 1961). These children seem to have difficulty in generalising, in sustaining attention and in verbalising feeling.

Getzels (1966) reports findings by Milner and Hess on a significant relationship between the quality of verbal interaction at home and reading readiness and language skills. Kellmer-Pringle (1971 p55) asserts that retardation in these areas is largely due to environmental deprivation and better provision of nursery schools could counteract this waste of ability. The Plowden Report (1967) indicated poor language ability as a major drawback in English lower class children. Stones, cited in Ramphal (1972), maintains that intellectual development can be improved if the language usage of a child is improved.

The disadvantaged child thus lacks the most important tool of learning. He needs to argue logically, examine solutions, anticipate and plan ahead, reflect and project, i.e. he needs the tools of thinking for which language is a prerequisite (Tough 1973). If he cannot use the tool to think and express himself, to communicate and generalise, he cannot progress at school. For the black child in Southern Africa the problem of proper language usage is aggravated as he has to switch over to another medium of instruction after the first three years at school.

Research in this country has shown that the traditional black school beginners from environmentally deprived circumstances suffer drawbacks which often lead to failure. The child who has acquired a scholastic task attitude will have specific expectations, show dedication, concentration, and an inquiring mind. The westernised child has to a great extent attained this before he goes to school and finds a continuity between home and school. He is used to give full attention to an activity he has to complete individually; he has acquired a sense of independence and established his self-image; his activities with books, crayons and pencils help him to anticipate school positively; and his visual perception has been developed sufficiently for school tasks. In developing countries in third world circumstances, however, foreign systems of education, often from America or Europe, have often been imposed on traditional education and the child finds himself in two different worlds when he enters a western type of school (Ferron 1981). Steenekamp (1971) found that 7-year-old black school beginners had not acquired visual perceptual abilities necessary for formal education and that a programme on form perception was needed before they could start their scholastic activities. It is often argued that the sooner the child can make contact with the modes of thought, attitudes and values of the

world in which he must find his place as an adult, the better for him. It can save him from learning without understanding in his school years. An example is the imitating behaviour found in Pedi children at play. Together with other cultural aspects it leads to an imitative rather than a scholastic task orientation (Vaughan 1977). The child needs to discover concepts of space, time, cause and relationships, to break away from parrotlearning (De Landsheere 1977 p509).

Not only cultural differences, but also socio-economic factors affect scholastic success. Van Rensburg (1979) found that 65% of Indian school beginners from less privileged homes were not ready for formal education. The results for the sub-tests Reasoning, Numerical and Gestalt of the Aptitude Test for School Beginners, standardised for South African Indians, were as follows (the norm, i.e. the expected percentage for each category, is given in brackets): Very weak 29% (7%), Weak 36% (24%), Average 29% (38%), Good 4% (24%), Very good 2% (7%). The families were from the lowest income group with parents having little formal education and fathers working as artisans or unskilled labourers; the average number of people living in the home was 7,6; opportunities for school directed activities were scarce.

If the environment modifies natural endowment as claimed by many authorities, something must be done as early as possible to provide positive environmental conditions, preparing the child for his future. Getzels (1966), for instance, stresses the fact that the lack of early experience has negative results on later learning. In the past much was said about providing differentiated education in school, but the issue at hand is to provide preventive, not remedial, intervention. A stimulating and challenging environment during preschool years could help develop the natural potentialities of the child. Getzels (1966) argues that cognitive abilities needed for school success are in many ways dependent on relevant experiences in the preschool environment.

Although in all societies the young child is taught ways of behaviour acceptable to the society in which he lives, modern psychological theories are saying that early learning is crucial for subsequent learning. Freud stressed the importance of early learning by limiting the formative years to age five (King 1983). Nyikana (1982) claims that

33% of the cognitive development obtained at 18 years of age is based on what was learnt in the first six years. Bloom concludes from many studies on intellectual development, that if intelligence development is completed by the age of 17, then about 50% of ability is fixed by the age of four, and the next 30% is fixed in the period of four to eight years of age. The last 20% of development occurs between eight to seventeen years. As far as scholastic achievement is concerned, 33% is determined in the first school year (De Landsheere 1977 p507). Ferron (1981) states that the child learns more in the first five years of his life than in any subsequent period of five years. Environmental stimulation comes from a vast number of specific situations which the child uses incidentally (Fowler in Frost 1968 p207). It might, therefore, be possible for the adult to manipulate those specific situations to enhance learning and stimulate thinking (Schermann in Frost 1968 p266). This is a very important aspect of early childhood education. Environmental stimulation during early childhood has been shown by many researchers to affect development and consequent school achievement very positively and the early years have been singled out as the best period for learning through experience. Furthermore, intelligence is now viewed as capable of being modified by experience (Frost 1968 pviii).

Different aspects of development that are positively influenced by such early experience have claimed the attention of different authors. Some have carried out empirical investigations regarding improved IQ changes, some occupied themselves with the theory of critical periods, or superior attainment and gains in specific cognitive areas, while others have focused more directly on social and affective improvement or enhanced attainment when starting school.

The argument for early learning was taken a stage further when analogies were made between the human mind and what was called critical learning periods in biological studies and especially the imprinting mechanism. King (1983) attaches significance to the theory that a specific learning task best takes place at a specific period or age (the critical periods theory). Froebel, also, had already spoken of "budding points" and Montessori's theory of sensitive periods stressed that if once passed over, they never recur (Ferron 1981). Getzels (1966) argues on the same lines and stresses that not only the availability but also the timing of experiences can help the child to realise his potential - the child learns

to perceive and to generalize through his early experiences. He actually learns to learn. The concept of 'learning readiness' is discussed in depth by Bakara (1970) who quotes research evidence on the critical period for learning readiness before the age of six. Nevertheless, much controversy exists about this issue. Stein and Susser (1970) hold that the intervention that is effective in producing IQ change has not been limited to a well-defined critical period; critical periods are not so fixed in human intellectual development as in animal development. There are, however, more favourable periods for learning, e.g. in language development. Allowing, therefore, for the possibility that the optimum time for acquiring a specific skill may be passed by without appropriate opportunities for practice, early experience during preschool years would seem to be of great importance. Some of the claims of people such as Froebel and Montessori, who put forward theories without any empirical evidence, are confirmed in more recent research.

Kellmer-Pringle (1971) argues that sound foundations during preschool years can prevent the waste of intellectual potential. It seems as if language development is of special importance. Gouws (1977) cites Vygotsky's claim that sound language control is important because it is the basis for higher intellectual processes, and Bloom's claim that the stimulation received in the first five years of life determines future development. This is supported by Olivier (1976) who holds that between the third and fifth year the possibility of increasing active vocabulary is greatest (Olivier 1976). Barnard (cited in Jooste 1976 p72) claims that the brain develops most at the range of three to four years of age. Correct guidance in this period helps the child in expressing his thoughts in understandable language. In his research on the reading and arithmetic attainment of children in Sierra Leone, Ferron (1981) found a deterioration in reading and arithmetic ability with increase of age and concluded that the provision of nursery education could counteract this by providing basic concepts in language and number at the critical stage.

It has been argued that specific intervention could lead to improved intelligence. Growing interest in the quality of the environment and growing sophistication of IQ tests led to experiments to determine what effects specific intervention programmes have on IQ. Evidence of **gains in intelligence test scores** are regarded as a dramatic way of proving the value of early intervention. Getzels (1966) cites various research

projects that support claims of raising IQ test scores, e.g. Weikart's research data which show gains as early as three months after starting a programme. Stein and Susser (1970) claim that the potential for IQ change is greater the more unfavourable the social and educational origin of the child is, whereas Douglas and Ross (1964) found ordinary programmes not as successful for those children from the least stable or stimulating homes as for upper skilled manual class children.

Fabian (1985 p60) cites a project conducted in Milwaukee in the USA in 1964 in an area that had the lowest income, worst living conditions and highest population density. A random sample of children were exposed to a stimulating environment from birth. In this case specific intellectual enrichment was undertaken. When their IQ's were compared with a control group at 42 months, their average IQ was 33 points higher than that of the control group. Not only the value of early intellectual stimulation is demonstrated by this project, but also the need for preschool education especially for the socially deprived. As elaborated on in the work of Piaget, Bruner and Jersild, many concrete sensory learning experiences are needed. From these experiences the child can generalise and form concepts (Mukerji in Frost 1986 p33).

Various researchers in the 50's and 60's have found IQ gains in children exposed to nursery school programmes. Lee's study on Negro children in Philadelphia (1951) favoured the kindergarten group who consistently scored higher than the non-kindergarten group in all re-testings. Kirk (1958) found 10 to 30 IQ points gain in a group of feeble-minded preschool children, a significantly greater improvement than in the control group. Seventy percent of the experimental group benefited. The experimental group maintained these gains when tested from three to five years later. Gray and Klaus (1963) worked with under-privileged Negro children who started a programme at 3,6 years of age. They had exposure to two summer vacation programmes and regular home contact during the year. They showed an average gain of ten IQ points. Older children of five years attended only one summer programme yet they still had an average gain of more than five IQ points. On the other hand, control groups showed a decrease of two to five IQ points. In Israel, Smilansky (1964) found gains of six points of IQ on the Stanford-Binet test and of ten points on the WISC after low status children had been exposed to a specially enriched preschool programme for a year. Studies done by Burt (cited in Tunmer 1967) on differences in measured

intelligence of identical twins reared apart, further supports the case for improving IQ by changing the environment. He found that the correlation between the IQ of identical twins reared together was over 0,92 whereas it could drop to as low as 0,67 when they were reared in different environments. From this it could be argued that an improved environment could produce improved measured intelligence.

Some research has, however, shown that these gains might be of short duration and are not always sustained through elementary school (Harry Beilin in Stanley 1972 p165). Although socially disadvantaged children who were involved in Project Head Start in the USA soon showed initial gains in IQ scores, after two years Stein and Susser (1970) found a loss in the initial advantage. Several possible explanations have been put forward. The relatively large gains in IQ, especially during the first year of an intervention preschool programme, may be caused more by a change in motivation than a change in capacity. Kohlberg (1968) attributed the primary cause of increase in IQ in Head Start children to an improvement in attention span and rapport with adults (p1015). The duration of the special programme might also have been too short. The normal school programme and the social transition undergone by the control group on school entry could also have been responsible for their better achievement. Children from the Head Start programmes might have had an easy and smooth initial entry to formal school and this had initially motivated them positively, but this early positive motivation could not be sustained. Douglas and Ross (1964) tested British children at 8, 11 and 15 years of age, some of whom had been to nursery school and some who had not. At eight years the ex-nursery group scored higher than the mean for the whole group, but in the subsequent testings they scored below the mean of the whole group. In explanation they suggest that the personal care experienced in a nursery school is replaced by a more impersonal approach in large formal classes in primary and secondary school. Furthermore, socially handicapped children (who at the time constituted the largest percentage of nursery school children) need a continuing personal approach and start falling behind if deprived of this.

If Douglas and Ross's arguments have validity, they can be interpreted as a plea for changed primary school methods rather than a negation of the value of preschool experience.

Up to this stage in this chapter evidence has been presented for general or global IQ gains as a result of preschool experience. Other investigations claim improved cognitive development in special areas. This has been found in improved concept formation, labelling, communicating, questioning and using language in an imaginative manner (Schermann in Frost 1968 p267). Researchers like Bereiter, Gray and Weikart (cited by Getzels 1966) show the following positive effects of preschool intervention: Apart from raised intelligence test scores, there was significant improvement in vocabulary and language expression, indications of reading readiness, as well as arithmetic reasoning in their experimental groups. Success in learning to read, write letters and write numbers depends on visual-motor ability. De Jager (1982) found a visual-motor age difference of 9,5 months on the Bender-Gestalt test between his experimental and control groups. Statistically significant progress was made by his experimental group as a result of exposure to a preschool programme. In contrast 74% of the control group under-achieved. The direct instructional model used by Bereiter and Engelmann yielded a two year gain in language improvement in a group of disadvantaged Negro four-year-olds after seven months of exposure (Bereiter and Engelmann in Spodek 1973 p182).

It must be noted, however, that genuine improvement in the specific cognitive areas are questioned by some investigations in the same way as global IQ improvement has been questioned. King (1983) shows that the improvement as a result of preschool "teaching" of various skills is challenged by those who maintain that the skills can be mechanistic and based too heavily on rote learning. Instead of acquiring genuine conceptual understanding the children are merely taught their skills through simple association techniques.

Affective and social aspects of development have also been found to show improvement after exposure to preschool programmes. The close relationship between the satisfaction of psychological needs and successful development is stressed by Kellmer-Pringle (1971 p212). The need for security, for the giving and receiving of affection, for new experiences, for recognition and self-esteem, for acceptance by other children and for independence and responsibility can be satisfied in an appropriate preschool programme. Providing relevant experiences for disadvantaged children in first world situations help them to progress

better at school and counteracts the development of a low self-concept. This was one of the gains claimed by Project Head Start in the USA in 1965 (Almy 1975).

Other gains have been claimed in aesthetic areas such as singing, music, art and, especially, drawing where the child expresses his experiences of his world; in physical properties, when his body develops through play; and in identifying with the moral values of his group.

Evidence of improvement in the three main areas of general IQ, specific cognitive areas and affective/emotional aspects, provided theoretical justification for specifically assisting children from "deprived" backgrounds at school entry, e.g. the large scale experiment of Operation Head Start. All the recipients of the programme were deprived children, many of them Negro or Puerto Rican from inner cities. The arguments for improved adjustment are also used to develop special preschool programmes for children in developing countries and provide the incentive for many of the well known Van Leer Foundation programmes, which are offered over the world to provide or improve preschool education.

A study by Akim et al (cited by Ferron 1981 p217) among young African children proved superior motor development of African children to European children at similar ages. The difference was best observed in younger children: the younger the child the greater the advance of the African child. The deduction is made that most of the lags the older African child shows, must be due to lack of the kind of environmental stimulation the European child experiences. This was demonstrated in an experiment in Freetown when Ferron tested Creole nursery school children, who were carefully matched with English nursery school children. He tested their perception, muscular co-ordination, drawing and writing skills, and language, using a preschool test of 25 items designed by himself. Results indicated statistically significant differences in mean scores at every age level on all five sub-tests, the British children performing better than the Creole children. The areas mostly affected were the identification of simple shapes (circle, triangle, square), the handling of pencils, pictorial representation and three-dimensional discrimination. The lower level of exposure to such activities in early years among the Creole children, as compared with the

British children, was seen as the main reason for their weaker performance (Ferron 1981).

In a study on child rearing practices in different ethnic groups, Ferron (1981) found that the African tribal environment in East Africa did not contribute to the development of certain scholastic skills needed in a western type of school. In many African cultures no provision is made for individual problem solving as the child grows up. In a paper on Education and National Development, he concludes "if nursery education is considered so important in advanced technological civilisations, it (is) absolutely vital for developing countries". One of the many aspects that should be considered, is pre-reading exercises to help the child who did not have the opportunity at home to handle books and listen to stories (Ferron 1983 p13).

In South Africa Herbst (1986) investigated the effect of a programme in which selected western play material was used as stimulus material to improve visual perceptual abilities of black school beginners in the Orange Free State. She found that this early intervention was a great help in preventing learning problems. Without the intervention programme the control group did not progress as well as the experimental group in early formal schooling.

All the researchers who showed evidence for general intellectual improvement, improvement in specific cognitive areas and in emotional and social adjustment, were concerned primarily in improving deprived children's opportunity for benefiting from formal school. It has been argued, however, that all children (not only deprived children) find the trauma of entering the formal learning situation lessened by meaningful preschool experiences. Many investigations have specifically explored the opening year or two of formal schooling and compared the progress of children with and without preschool experience. The results claim that nursery education has a valuable scholastic task because it facilitates entry into the first grade by lessening the possible setbacks. There is some South African evidence to back this claim. Donald (cited in Faure 1971) claims that through preschool experience the child acquires powers of perception, spatial orientation and concepts of time and is not as bewildered by a totally foreign situation, with the result that learning

can take place without excessive tension. Children adjust better to the classroom situation of order and control - they are better equipped to respond positively to routine and imposition of management by teachers to promote formal learning (Todd Risley in Stanley 1972). Schweinhart and Weikart (cited in Jowett 1986) found a greater commitment to school and task-orientedness in the experimental group who had attended a nursery school, as compared to the children who had no preschool education. Their perceptions of themselves and their abilities were positive because the teacher acknowledged their learning readiness.

Another approach was used by Jowett (1986) when he compared the school readiness of play group and nursery school children. He found the latter group better prepared for school: they concentrated better, exhibited more purposeful or creative play, they persisted longer with a task when encountering difficulties, were more independent, and their interaction with the teacher was focused on obtaining better information rather than getting help. They had greater social maturity and displayed eagerness to learn which helped their adjustment on school entry. Kruger (1984) found that nursery education had a definite positive effect on cognitive functioning at the time of school entry, especially concerning number, auditive perception and memory.

In the research by De Jager (1982) on visual-motor abilities it was noted that the experimental group had a marked advantage on entering school, but the control group, however, improved during the first six months. The advantage was greatest at school entry. Exploration by movement, touch, smell, seeing and hearing is an important aspect of the first school year and opportunities offered for this in the preschool help prepare children for school entry. Olivier (1976) found that children had learnt to interpret stimuli correctly, which was an advantage for them. A good preschool programme should bring to light lags in important areas like visual and auditive perception (affecting reading skills), spatial orientation (affecting calculations and spelling) and dominance (affecting reading and spelling). Prevention of learning problems, failure and negative attitudes results from early identification (Garbers et al 1976).

It has already been noted that some research findings suggest that the gains attributed to preschool experiences are short lived. One important

study that negates this criticism, is a major longitudinal study based on the Ypsilanti-Perry Preschool Project that carried out research over 18 years in carefully matched groups. They found 50% of experimental children completing high school (compared to 25% of the control group); by age 15 experimental children were a year ahead; remedial education was needed by 19% of experimental children (compared to 38% of the control group) (Ramsden 1982). The programme consisted of three years high quality preprimary education. In South Africa Van der Merwe (1978) found similar gains in Transvaal schools. Surveys done in Std 8 and again in Std 10 revealed a more positive attitude to school, better achievement in language, arithmetic and science, enthusiasm for learning and fewer pupils leaving school early in the experimental group who had attended nursery school.

In conclusion it may be argued that in this chapter we have provided evidence in support of the positive influence of preschool experience in various areas of the child's development. King (1983) could be supported in her statement that quality nursery education is a social and intellectual experience which positively but yet not dramatically, influences the development of preschool children. Meaningful preschool experience should be a priority especially in developing countries. Not all preschool education succeeds, however. Mere attendance of a preschool in the Odi district did not significantly prepare the child better for formal schooling. Possible reasons are the lack of facilities and equipment, large classes, poor teaching and impoverished home conditions (Lehobye 1978).

The implementation of the ideas regarding preschool education and the problems connected to meaningful implementation will be discussed in the next chapter. It seems that the more one looks at the psychological theory and its implications to school readiness, the environmentalist and interventionist justification for preschool education grows in importance, and therefore the practice of preschool work is being pushed more into the structural rather than the free approach.

CHAPTER FOUR

IMPLEMENTATION OF PHILOSOPHICAL AND PSYCHOLOGICAL
IDEAS CONCERNING EARLY EDUCATION

Most nursery school theorists claim that preschool education is appropriate and valuable for all children. In many countries it was, however, poor social conditions which stimulated the development of preschool institutions rather than the philosophies of people.

In America in the 1920's no clear distinction was made between day care and nursery school, apart from the fact that day care was regarded as being for working parents that need whole day care, while nursery schools were for the children from higher socio-economic groups (Durkin 1972 p6) and so could occupy shorter periods of the day because the possibility of mothers working the whole day was less. Read (cited in King 1983) draws attention to the support given by the American government for nursery education during the Depression of 1930 and during World War II when many mothers were employed in war related jobs. In these institutions and in these circumstances greater emphasis was put on health and welfare than on education.

In 1944 the English nursery school theoretically became an integral part of the British education system (Weber 1971 p166). The 1944 Education Act was a blueprint of which all aspects were not put into immediate operation and in fact the British provision of nursery education lagged behind that of the continent and America at this stage. During an investigation of English nursery education in 1965 Weber (1971) found that infant education was based on individual differences of children and respect for play and activity as a child's natural way of learning. The Plowden Report (1967) stressed the importance of sound preschool education for good achievement at school and prompted better provision for those who needed it.

King (1983) stresses a number of sociological influences which brought about a more rapid expansion of nursery education in the West in the

later part of the twentieth century. The first was that, partly because of greater use of modern birth control methods, more women joined the labour force. The birth rate dropped and so more women could return to their jobs earlier or seek new employment. Secondly, women have gained in the occupational levels and were holding more demanding jobs which enabled them to pay for nursery care. For many years fears have been expressed about the negative effect of prolonged absence of mothers on their young children. New insights into the effects of regular separation from the mother before the age of five or six years for a relatively short period as not being harmful, made mothers feel less "guilty" in leaving their children at nursery school (Austin cited in King 1983). Finally parents had a greater awareness of the need to have children well prepared for life. In these circumstances a need for more comprehensive child care outside the home to substitute for the mother's care, arose.

Much interest in nursery education was triggered with the introduction of Project Head Start in 1965 in America. Nursery education assumed a new philosophical-psychological-sociological role in focusing attention on the waste of intellectual potential that normally occurs when disadvantaged children are not assisted in developing inherent capabilities. Attempts were made to provide for such deprived children throughout the nation; especially the poor, underprivileged and deprived, were to be exposed to an enriched preschool programme (King 1983). The focus was on early intellectual stimulation for children from low-income families.

Apart from these sociological considerations, the issue of school readiness gained in importance. As early as the 1920's attention was being directed to the measurement of and preparation for school readiness. Concern about efficient progress in the primary school provided a more academic perspective on nursery education. In developed and developing countries education is a high priority because skilled labour is needed. Preschool education could be seen as an investment in human potential. If subsequent formal schooling was unsuccessful, state money was being wasted. Therefore, proper preparation for school has economic implications as well (Reilly 1983).

In the 1970's American educationists became aware of the informal character of teaching in Britain, where it was referred to as progressive,

modern, child-centred and integrated (Stephens cited in Garbers et al 1976 p151). The term Open Education was used to contrast it with strict disciplinary practices and rote memorising. In the "modern" approach ideas of Rousseau, Pestalozzi and Montessori feature strongly. It makes use of play and activity, it endeavours to give the child pleasure and satisfaction while it allows for activities which have meaning for the child (Ferron 1983 p16). In the context of the present discussion the American support for this approach might be interpreted as a reaction to structured formal programmes like those of Bereiter and Engelmann.

It has been shown that philosophical ideas coupled with social pressures have resulted in better implementation and increased provision of early education in many countries. In the Netherlands, for instance, all four to six-year-olds attend preschool programmes as part of the primary school; in Belgium the same policy is followed; in Israel free compulsory preschool education is provided for five-year-olds but fees are paid by three and four-year-olds. Despite these fees, 97% of the four-year-olds and 87% of the three-year-olds attend preschools because virtually all capable members of the community are at work (Van der Merwe 1980). For the same reason, large numbers of Russian preschool children are provided for in preschools; provision ranges from 20% in rural areas to 80% in large cities. It would seem as if provision of nursery education in Britain lags behind other European countries; seventy-five percent of three and four-year-olds are provided for, but 50% of these children are in play groups which are not subsidised by the state (Short 1981). The European Commission Report on child care reveals British nursery school provision as the worst in Europe with an average of two and a half hours a day for 23% of toddlers. Reception classes at primary schools for five-year-olds absorb 20% of four and even three-year-olds (Judd 1988).

It is clear that certain countries regard preschool education as essential in modern times. The exact way in which the ideas are implemented differs widely depending on specified aims to be reached and is practically expressed in the different models of preschool education that exist.

As already mentioned in Chapter 2, philosophical ideas about the nature of man are basic to the daily programme used at a nursery school. The two main approaches are the behaviourist view and the phenomenological view. The first sees man as controlled by external stimuli. Associative learning that produces cognitive, academic or social skills is under control of the teacher. In the second approach man is seen as free to choose. Education aims at guiding the child to learn by involving the whole child in exploring and discovery in a less structured environment. Aims and programmes will therefore differ widely from a behavioristic academic programme to a very informal open programme that is dictated by the child's readiness for learning and provides for self-expression rather than knowledge. These two broad approaches are recognised by most educationists but are differently described. Three authors that restrict their analysis of models to the two basic views are MacDonald, Elkind and Morrison.

James MacDonald (in Spodek 1973 p104) chooses to refer to "open" and "closed" models, with the Bereiter-Engelmann as example of a closed model (clear goals which are taught directly) and the World of Inquiry School in Rochester, N.Y., as an open model in which individual inquiry, freedom of choice, problem-solving approaches and more flexibility reflect Progressive Education.

David Elkind (in Spodek 1973 p108) distinguishes between Instruction vs Enrichment, or "enforcement from without" and "development from within". The instruction models are mostly propagated by those who are concerned with disadvantaged children, like Deutsch (1966) and Bereiter and Engelmann (1966). Elkind mentions Fowler and Moore who, however, used similar approaches for advantaged children. They claim self-expression and creativity are not abolished, but channelled and academic learning can be enjoyable if instruction is handled correctly (p115).

Morrison (cited in King 1983) distinguishes between skill-oriented and child-oriented approaches. Arguments against a highly structured skill-oriented programme suggest that such a programme may lead to teaching concepts for which the child is not yet ready and may inhibit a sense of initiative. King (1983) points out, however, that underprivileged children may need a more structured programme.

Apart from the broad distinction into two opposing approaches, other authorities have suggested a more detailed analysis and various typologies have been suggested on the grounds of the aims of various models.

Weikart (in Stanley 1972) places preschool programmes in four categories:

1. Programmed curricula which are highly structured and have clear educational goals with explicit instructions for the teacher, who initiates learning activities;
2. Open framework curricula in which concepts are formed through interaction with the environment and basic cognitive processes are developed;
3. Child-centred curricula in which social and emotional growth are very important because the "whole child" must be developed;
4. Custodial measures in which the child is looked after in a safe place and cared for physically without specific educational stimulation.

Mayers (cited in Verzaro-Lawrence 1980) groups models into four categories:

1. Child-Development models which have as their goals self-actualisation of children's inherent potential;
2. Verbal-Cognitive models which are organised to facilitate broad cognitive growth with emphasis on development structures for logical thought;
3. Sensory-Cognitive models which emphasise child-environment interaction as a vehicle for increased sensorimotor competence;
4. Verbal-Didactic models which utilise behavioural objectives which are met by a series of systematic teacher presentations, linked with specific, reinforced child responses.

Noel (cited in King 1983) distinguishes five approaches which are revealed in early childhood education:

1. The Developmental Approach which aims at totality of development through play;
2. The Cognitive Approach which makes use of direct teaching by teachers for concept formation and problem-solving;
3. The Content-oriented Approach which fosters sensory discrimination and motor abilities and aims at concentration, differentiation, counting and writing;

4. The Compensatory Approach which emphasises language development of culturally deprived children to assist them in formal schooling and teaches specific skills like counting;
5. The Custodial Approach which makes use of creches and day care centres for the physical well-being of the children without paying attention to educational stimulation.

When looking at these different expositions it seems as if there is a growing agreement about how to categorise nursery education philosophies and related programmes. Despite differences in terminology, the assumptions underlying the various models are similar. By comparing the three typologies, it becomes evident that these three authorities agree on the basic approaches to nursery education. Table 4:1 supplies a comparative summary of their ideas.

Table 4:1 Models for Nursery School Education

Weikart	Mayers	Noel
1 Child-centred Whole child is developed	Child Development Self-actualisation of potential	Developmental Approach Totality of development
2 Open Framework Basic cognitive processes	Verbal-Cognitive Logical thought Cognitive growth	Cognitive Approach Concept formation Problem-solving
3 Open Framework Interaction with environment	Sensory-Cognitive Child-environment interaction	Content-oriented Sensory discrimination Motor abilities
4 Programmed curricula Highly structured Explicit instructions for teachers	Verbal-Didactic Systematic teacher presentations	Compensatory Language development Specific skills
5 Custodial Physical care	-	Custodial Physical well-being

In line with the different typologies, Garbers et al (1976) have provided a very useful identification of models. In this thesis these models are divided according to Morrison's classification into skill-oriented and child-oriented approaches (King 1983). The first six fall into the skill-oriented typology while the remaining seven are more child-oriented in their methods and philosophies.

1. **Behaviour Modification.** This structured programme stresses reading, writing and arithmetic, and makes use of rewards. Don Bushell (in Spodek 1973 pl64) claims children learn more with greater enjoyment because tokens support the child's motivation to learn. Desirable behaviour is heavily reinforced.

2. **Academic Preschool.** This programme was initially developed for culturally deprived American children to help prevent school failure. Because the current investigation deals with culturally deprived children (in the western sense of the word), more prominence is given at this stage to this model on which extensive literature exists. The possibility exists that this kind of model might be part of the solution to problems experienced by the group under investigation.

Small groups are drilled in skills of reading, language and arithmetic. Music and songs are used to facilitate learning. The purpose of the drills is seen to be the speeding up of normal learning. Little scope for creativity and self-expression exists and the programme is more teacher centred. This is contrary to the "Whole Child" approach; the rationale for such structured intervention is that the disadvantaged child has an essential need to improve language and reasoning abilities. This takes time and often the time available does not allow for unintentional learning through enriched experiences without direct intervention. Bereiter et al (1966) claim that language handicaps can be overcome by such direct intervention in a year's time. Because emphasis is on language development, Noel (cited in King 1983) categorises this kind of intervention as compensatory.

Carl Bereiter (in Stanley 1972) pleads for preschool programmes for the disadvantaged that are correlated with formal schooling so that the primary school teacher can build on what was learnt at preschool. The preschool programme should become part of the total elementary school curriculum design.

The Bereiter-Engelmann teaching methodology can be described as a programmed situation in which the teacher initiates learning activities and the child responds. It has clear goals with explicit instructions for the teacher (Weikart in Stanley 1972). Bereiter and Engelmann (in Spodek 1973 pl77) characterise their method as intensive, direct

instruction that uses a fast pace with many responses from children (500 in 20 minutes). It reduces task-irrelevant behaviour, requires maximum verbal responses, provides continual feedback and demands hard work from the children. Some critics claim that the demands of the programme are so great that they produce excessive stress and anxiety, dislike for school, lack of spontaneity and absence of creativity. The producers of the programme, however, claim that these fears are unrealistic. They found positive personality development and self-confidence in children who became aware that they had accomplished much (p186).

3. **Tuscon Early Education Model.** This model was designed for deprived Mexican-American children, to improve academic and social abilities, especially in the language area. The four fundamental aims are directed at school readiness: language ability, intellectual development, motivation and social skills. Hughes et al (in Spodek 1973 p231) explain that their initial premise is that these children need to participate in the technical, social and economic life of contemporary America. Without these skills and abilities their participation will be limited. A positive attitude to school and learning, a willingness to persist, an expectation of success and co-operation are positively fostered (Hughes in Spodek p232-3). The programme also provides psychological services and parent involvement.

4. **Model of the Institute of Developmental Studies (I.D.S.).** This model includes the first years of formal school. Two years at preschool and three at elementary level complete the course. Reading, language, concept formation, mathematics and science are on the timetable to ensure cognitive development; building of the self-image and emotional development are also aimed at.

5. **Soviet Preschool Education.** The aim is to develop a communist morality through a highly structured programme. No individual play takes place so as to foster a collective consciousness. The attitude to work must be positive.

6. **The Skill Development Curriculum** for three, four and five-year-old disadvantaged children is another structured model, but is not mentioned by Garbers et al (1976). It was developed by the DARCEE (Demonstration and Research Centre for Early Education) at the George Peabody College. Aptitudes correlating with academic achievement are developed through a

structured instructional programme. Sensory skills include discriminatory, relational and sequential skills. Abstracting and mediating skills cover concept development, association, classification, sequencing and critical thinking. Response skills include verbal and small motor co-ordination skills. Not content as such but rather skills to process information form the basis of the curriculum (Camp in Spodek 1973).

In contrast to these formal structured programmes there exist models that allow for spontaneous and free development. Seven of these models will be briefly described.

7. Bank Street Model. The Early Childhood Centre of the Bank Street College of Education provides programmes for disadvantaged children and their parents (Biber in Spodek 1973 p250). Learning how to learn is more important than specific content. Spontaneous expression through play and experimentation, communication which enhances language ability, emotional development, establishing a positive self-image, social interaction and mastery of the environment are important aspects of this programme. It is claimed that the total child develops through his own activities.

8. Cognitive Model. Also known as the Weikart model after its designer, David Weikart, this model is based on Piaget's theory of cognitive development, and gives particular emphasis to the transition from the pre-operational to the concrete-operational phase (the second and third in Piaget's model of cognitive development). It aims at developing reason, communication, expression, decision-making and discovery, through activities based upon the interests and abilities of the child. Objects from the natural environment are used for cognitive development. Socio-dramatic play and pre-maths exercises are presented. Through carefully structured problems the child has to re-organise his existing level of thought. He is involved with cognitive tasks which prepare him for the classification, conservation, reversability and differentiation tasks characteristic of the concrete operations stage. The teacher does not teach but creates opportunities for individual development of cognitive structures. De Korte (1977) stresses the fact that in this model there should not be formal instruction. Instead guidance through well chosen apparatus and questions should be given. The child is expected to discover the solutions for himself.

Weikart (in Stanley 1972 p36) himself describes his approach as an open framework curriculum. There are specific goals, but the teacher is free to create activities in which the child participates; learning and concept formation take place informally through interaction with the environment. Through these activities the child incidentally learns to reason and see relationships.

9. Parent-Education Model. Gordon (in Spodek 1973 p277) reports that the Parent Education Programme of the Institute for Development of Human resources of the University of Florida is specifically geared to improve the self-esteem of the mother in disadvantaged families so that she can see herself as an agent of support and stimulation of her own child and come to value materials that can stimulate her child. It was realised that it was difficult for mothers with limited backgrounds to cope on their own. Mothers of children as young as three months are helped to provide intellectual stimulation for their children at home following the theory that the intellectual framework is already established by age three (Lambie & Weikart cited in Garbers et al 1976).

10. Responsive Model. The child is free to choose and discover without fear of punishment. Not teaching, but development of the self-concept is important. It is claimed that sensory perception, language ability, comprehension and problem-solving are improved. Child-initiated conversation is encouraged (Spodek 1973 p204). Parents co-operate closely and are instructed in the use of educational toys which they may borrow from the library. They are instructed once a week for ten weeks in aspects of child development. Head Start children are taught according to this model.

11. The Open Education Model of the Education Development Centre (E.D.C.) is the culmination of educational thought through many ages in which spontaneous learning through play has been advocated. Totality of development including language, concentration and independence is developed through play. Activities are changed often to ensure sustained interest. This child-development model aims at self-actualisation through a wide range of free choice experiences (Mayers cited in Verzaro-Lawrence 1980). Other goals are interaction, inner control, self-esteem, self-expression and learning about the environment (Noel cited in King 1983). The child initiates and the

teacher responds (as in the Bank Street model and in Montessori theory). Social and emotional growth is important and the "whole child" must be developed. Independence, creativity, self-discipline and constructive peer relationships are highly valued and individual needs are responded to (Weikart in Stanley 1972 p36). Haasbroek (1974 p13) holds that the programme should correspond more with what is accidentally learnt at home than with formal school education. Le Roux (1980) admits that this model provides good opportunities for initiative and creativity but it lacks specific guidelines for the teacher.

12. **Montessori method.** Spontaneous development takes place along lines of natural interest. Free activities are allowed as long as the children do not disturb others. Sensorimotor, intellectual and moral development take place through real life exercises, language activities and basic subjects, as already mentioned in Chapter 2. The developing child is extracting meaning from his environment in relation to himself (Ferron 1981 p4). The graded apparatus is not only fun, but allows the child to discover the laws of nature. He learns to think and observe.

13. **Model Nursery School of West Germany.** The social conscience of the child is addressed through contact with real life situations. Didactic units are prepared to match their experience. Awareness of own identity is stressed. The programme does not aim at school readiness - it actually takes learning out of the school context.

This brings to a conclusion the exposition given by Garbers et al (1976) of various models found in nursery education. Each of these models is also representative of one of the four broad categories emerging from the comparison between the typologies of Weikart, Mayers and Noel in Table 4:1, namely the child-centred developmental approach, the cognitive approach, the child-environment interaction approach and the structured compensatory approach. The fifth category is not represented because pure custodial care does not claim educational rewards.

According to Almy (1975) adjustment was the important thing before the 'sixties; not what the child learns formally, but how he learns to control himself, exhibit emotional balance and relate to his world. With the cognitive developmental theory of Piaget gaining importance during the 'sixties, the emphasis shifted to a content-oriented curriculum. But in

the 'seventies the pendulum swung back, in western countries, to the affective-play-whole-child approach.

Sometimes specific programmes concentrate on a narrow area. In Israel the Matal science programme has gained acknowledgement by world authorities (King 1983). The programme challenges children to understand basic processes in the physical and biological world. Progressively more difficult concepts are introduced. Acceptance of success and failure, flexibility, creativity, initiative and aesthetic awareness are fostered.

The various models have emerged as a result of differing theories on early childhood education with accompanying different objectives. To be functional and pedagogically accountable, there are certain basic criteria with which preschool education should comply. One of the criteria by which preschool centres can be judged, is it has a pedagogically accountable programme. It is not easy to assess the influence of any programme on a human being and the task is still more complicated if it is a young developing child and the aspects in question qualities such as intellectual development or conceptual thinking (Oralie Mc Afee in Stanley 1972). The problem is to find the best instrument by which to measure all the effects of a preschool programme.

In terms of the nature of this thesis it was important to consider some of the effects of the more structured programmes for disadvantaged children. A number of positive results emerged.

Research quoted by Carl Bereiter (in Stanley 1972) shows that the academic preschool has a greater impact on IQ and achievement of disadvantaged children than the traditional child-centred preschool. The experimental children in the academic preschool programme did not show lags in motivation and adjustment measures; the children in the traditional experimental group were not better adjusted or more motivated despite their experience in a more conventional nursery school environment. This was reflected in the subsequent better school attendance of Bereiter-Engelmann trainees. The highly structured programme had better long term results than the child-centred programme and had very definite short-term advantages at school entry and during the first year at school.

The longitudinal Ypsilanti Perry Preschool Project that started in 1970 (David Weikart in Stanley 1972) revealed that underprivileged American children who attended a **cognitively oriented preschool** obtained higher scores in subsequent IQ tests and on achievement tests in elementary school as well as better ratings by their teachers in academic, emotional and social development. The effects were continued through the third grade.

A South African example that favours a more structured approach is supplied by De Korte (1977). He conducted research among white first graders in Transvaal to investigate whether the traditional South African preschool with its "whole child" approach fostered expected degrees of cognitive development. He tested for the pre-operational Piagetian concepts of conservation, classification and sequencing. The experimental group was found to be on the same cognitive level as the control group. He recommends a programme of explicit cognitive development to develop thought structures like identification, differentiation, generalisation and classification and to form concepts of space, size, volume, conservation, time, etc. The teacher should play a more directive role in confronting children with problems. This De Korte-model could be investigated as a possible model appropriate for rural black pupils. Because rote learning is already a danger with them, there should not be too much stress on group instruction. On the other hand, the individual child should not be left to discover relationships incidentally; he needs confrontation with problems.

A broader assessment approach might be needed than the methods used by the adherents of the structured programme. Garbers et al (1976) raise objections against such means of evaluating a programme: IQ test results do not give any indication of the educational success of the programme and often the test content is not in line with the curriculum or the aims of a programme are not kept in mind when the instrument is compiled. Few evaluative instruments cover the whole of the child's behaviour and often the use is restricted because specialists have to apply it. Allen and Masling (cited in King 1983) maintain that much of the research done on evaluation lacked adequate control groups, and the effect of preschool experience was not properly separated from pure maturation.

Proper evaluation could help to refine programmes. Questions that could help to evaluate a programme educationally are suggested by Garbers et al (1976 p194-201): Is it integrated with primary school education? To which extent is individualisation possible? Is there scope for the teacher to educate? Is there a close relationship with the life world of the child as experienced at home? Does it have a sound scientific basis? Are aims clearly formulated and does evaluation of the programme take place? To which extent are cultural differences taken into account? Does it make use of formal or informal education? Is the child-image contained in the programme acceptable?

Identification of quality programmes differs from author to author. From a psycho-pedagogical perspective the following modes of learning should feature in the daily programme according to Reilly (1983): sensing, attending, perceiving, imagining, fantasising, thinking and memorising. Le Roux (1980) sees three basic principles to be accommodated: activity, individualisation and socialising. Weikart (in Ramsden 1982) checks a quality programme against questions like: Who is active? Who is talking and asking questions? Is the child creative? Does he test out his ideas? Does he interact with his peers? Short (cited in van den Berg and Vergnani 1986 p141) relates quality to four factors: adult-child ratio, training of teachers, time devoted to constructive play activities and order and variety in the physical environment. Van der Merwe (1974) holds that a quality preschool programme should be based on the developmental stage of the pupil, allow variety, recognise the importance of play as opposed to instruction, provide routine activities to assist habit formation, stimulate creativity, foster passive and active language acquisition, develop intellectual ability and foster motor development through play and music. Whitener and Kersey (1980 p89) support a programme that stimulates curiosity and creativity through materials like play dough, paint and finger paint. The child who sees that his art is appreciated, develops good feelings about himself and gains confidence and satisfaction.

Although problematic, the assessment of programmes remains an important aspect of assuring quality provision of preschool education. A programme on its own is, however, of little value. It must be implemented physically in at least three different aspects: in a certain

area, using certain materials and by certain people, with the support of the family.

Firstly, the **physical layout** will be referred to briefly. Most western countries have specifications for the building and stipulations regarding the number of wash basins and toilets, the prescribed area for outdoor playing ground with sheltered nooks for separate groups as well as joint playgrounds with hard surfaces for wheeled toys, space for running, sand pits and fixed apparatus like swings or jungle jims. It is agreed that some sort of control regarding the facilities is necessary but in developing countries it is not possible to comply with such rigid specifications (See VdBerg and Vergnani 1986).

Secondly, **equipment** plays a vital role in the achievement of aims. There are many indoor and outdoor types of equipment on the market, but teachers can also improvise a lot of cheap equipment. When instructional material is needed, teachers should try to substitute expensive kits with self-made or readily available material (Almy 1975). De Jongh and Nel (1979) advocate that teachers should manufacture their own apparatus from waste material. Story books often depict white middle class life styles and values and working class children find it difficult to identify with the characters. Improvising stories from the child's life world can overcome this obstacle; children can be stimulated to dramatise the stories.

Christholm (cited by Lehobye 1978) holds that equipment should stimulate curiosity, interest, initiative, problem-solving, imagination and creativity; develop techniques in reading, writing, spelling and number; develop muscle co-ordination, manipulation and manual skills; promote growth towards independence, exploration, group ability and social competence. A dedicated, creative teacher can go a long way to achieve this with fairly cheap improvised equipment.

Another important item of provision is **health control and nutrition**. In all overseas countries involved in the HSRC investigation in preschool education (U.K., USA, Sweden, Scotland, Belgium, Israel, West Germany), health services are organised and offered free by local authorities like the municipality, community council or educational authority (Oosthuizen 1971). The intervals at which health inspections are carried out, differ from country to country. In Scotland, for instance, a doctor visits the

schools once a month and a nurse pays weekly visits. The services rendered also differ - some countries provide dental care, immunisation and speech and eye tests and medical reports on each child are kept. In most centres a balanced midday meal is served if children stay for the whole day, and a lighter meal is served at half-day centres.

A fourth important aspect of meaningful preschool education is **staffing**. Almy (1975) holds that the success of any early childhood programme depends on the quality of the teacher who puts it into practice. The 1961 Unesco Survey revealed that 84% of the 63 countries involved, had special **training** for their preschool teachers (Lehobye 1972). Forty-three percent had special training schools and 37% trained preschool teachers at ordinary colleges of education and universities. Apart from proper training, the teacher should have enthusiasm, provide security and order, differentiate for individual children, and stimulate children to participate freely (Grove 1978). Children with emotional problems need special care, consistency, reasonableness, trustful confidence and warmth (Hay 1984 p85). Provision of staff, however, refers to quality and quantity and the **teacher:pupil ratio** should be reasonable.

The teachers, however, need the support of the families of the children in their care. **Parent involvement** in any educational undertaking is important. Many authorities suggest that preschool education services should be community-based. The state, however, has to support such education financially, because communities that most need preschool education to compensate for poor conditions at home, are often not in the position to raise enough funds. If a low-income community is totally left to its own devices and compelled to carry on on a 'self-help' basis, the ultimate result may be of little educational value because the centre will be ill-equipped and under-staffed with untrained people (Short 1984). The role of parents in home programmes is discussed in Chapter 6.

Problems and possibilities regarding the implementation of ideas on preschool education experienced in the western world as set out here, have also been experienced in Southern Africa. It would seem that the pattern in most generally established nursery schools in South Africa is the informal child-centred approach. Van der Merwe (1980) points out the following five areas that are normally covered in South African programmes : language, creativity, music, world orientation, and culture and religion. Subsidised nursery schools in South Africa have more or

less similar programmes because they are affiliated to the Nursery School Association. The Handbook for the Association (1980) prescribes in broad categories that indoor play (using educational apparatus, music, stories, art), outdoor play (free or directed) and routine activities (toilet, refreshments, resting) be included. These activities were also recommended by the committee, appointed by the Transvaal Department of Education, that visited and made a study of nursery education in five overseas countries, namely USA, England, Scotland, Belgium and West Germany (Heyns 1967). Consequently Transvaal nursery school programmes aim at the harmonious development of the total child, i.e. physically, spiritually and intellectually (Van der Merwe 1980).

A short overview of the development and practical implementation of preschool education in South Africa follows in the next chapter, with some reference to the criteria mentioned above.

CHAPTER FIVE

THE IMPLEMENTATION OF EARLY CHILDHOOD EDUCATION
IN SOUTH AFRICA

Nursery education in South Africa became an important issue for groups of interested people as from 1930. The development falls into two phases: before and after it gained partial recognition as a part of the educational system. The first phase is characterised by initial steady growth, followed by a period of decline.

From 1930 - 1952 development was steady although slow and fraught with difficulties. The South African National Council for Child Welfare initially helped to form positive public opinion. At the conference of the New Educational Fellowship in Cape Town and Johannesburg in 1934 the aim, methods and content of education in a changing society were discussed by overseas, African and South African educationists. Apart from many other important issues, the provision for preschool children was given a great impetus (Malherbe 1937). It did not lead to immediate government action, but led people to becoming more aware of possibilities for early childhood education, one of which was the formation of a National Preschool Child Association. A Committee of Inquiry into preschool education was also appointed (Webber 1978).

Following on the 1930 Depression with resultant poverty and serious lack of proper education in rural and urban areas, a national conference on the Poor White Problem was held in October 1934. One of the recommendations was to promote preschool education in slum areas. There was, however, a lack of funds to provide education for poor children. Working mothers left their children at day care centres where little or nothing was done for the intellectual stimulation of their children. For the other population groups the situation was worse. No or very little provision of preschool facilities existed in those communities where poverty was most serious.

The Pretoria/Johannesburg Preschool Child Committee of Inquiry of 1934 made a study of the preschool field and promoted interest in this field. Existing facilities were the result of private initiative. Due to the efforts of this committee the Transvaal Provincial Council passed a resolution in October 1934 to establish and subsidise classes for preschool children in co-operation with the Union Health Department and local authorities. In March 1936 an amount of R2 400 was approved by the Transvaal Provincial Council as a special grant-in-aid to Nursery Schools in Transvaal (Webber 1978 pl3). Child-care centres that qualified for the subsidy were the Good Hope Nursery School in Pretoria (started in 1931 by the Pretoria Town Council) and six municipal health classes in Johannesburg, started as from 1930. An example of a privately initiated nursery school started in these years is Ekutuleni (Place of Joy), erected by the Anglican Mission in Sophiatown, Johannesburg, in 1936 for 90 black children to counteract the negative influences of urban life.

The comparatively new phase in education created a need for teachers to guide these children. Three training centres for whites were opened at the Witwatersrand Technical College (1937), the Lady Buxton Preschool Training Centre (1939) and the Pretoria University (1940) respectively. (In 1945 the Buxton Training Centre became the Barkly House Training College for Nursery Education.) Courses and syllabi for the new National Certificate for teachers in preschool education were laid down by a committee appointed by the Union Department of Education in May 1938.

The policies governing the provision of educational opportunities for the various racial groups in South Africa in the past had an adverse effect on the development of Nursery Education. In black education the numbers involved at all levels of education were still very small. Primary education was a priority and secondary education slowly gained

in importance. With restricted funds the conventional areas benefited when funds were allocated. The training of non-white teachers was mostly done through private initiative which was subsequently recognised by government authorities. The first institution to receive recognition and financial support was the Ekutuleni Nursery School where the principal gave her black assistants some training. In this period two more training centres for blacks were started by private initiative at Enkuliso (Durban) and Edenvale (Pietermaritzburg). It took ten years of negotiations before the Transvaal Native Education Department accepted some responsibility for subsidising the training. Assistant white teachers were trained at housecraft and technical schools. Assistant coloured teachers were initially trained at Barkly House before the Athlone training centre was opened in 1952 (Webber 1978 p92).

The work of the 1934 Committee of Inquiry culminated in the formation of the Nursery School Association of S.A. at a national conference in 1939. (The name of the association was changed to **The South African Association for Early Childhood Education (SAAECE)** in 1975). The aim of the organisation was to provide care, including medical care, for preschool children, to cultivate good habits, encourage physical, intellectual and social development and to guide parents in the care of their children.

The central and provincial governments did not at this stage take the responsibility for providing nursery education. The provincial education departments, however, agreed to subsidise and inspect eligible nursery schools, which was a step towards recognition of preprimary schools in the education system. By 1945 Central Government was contributing 50% to provincial costs for education, including registered nursery schools.

An important shift in attitude from welfare to education resulted from the De Villiers Commission Report in 1948. They were commissioned to investigate technical education, but they did not look at technical education in isolation because they regarded it as an aspect of general

education. They concluded that education was in a poor state in South Africa generally and recognised nursery education as an integral and necessary part of the South African education system (Potgieter cited in King 1983 p83). This was not put into practice as the new emphasis on Black education in a separate department occupied the attention of the new government formed in 1948.

The period discussed above runs roughly from 1930-1952. It was characterised by slow, difficult but steady development (Webber 1977 p92).

This, however, was followed by a period of decline: training of black nursery school teachers and assistants was stopped, eight nursery schools attached to housecraft schools were closed, the post of inspectress abolished and recommendations by Government Commissions were not implemented.

Following certain education acts regarding nursery education, it was stated in 1969 in a Press Release by the minister of National Education, that control of nursery education was then vested in the provincial education departments. Private non-subsidised nursery schools were also subjected to regulations. Programmes were specified so that activities to develop the child's creativity, self-expression, language, intellect, muscular control, aesthetic feelings and sense for routine activities like washing hands before meals, were to be included (Grobler 1972).

Further provision was made for the training of preprimary teachers by providing training at provincial training colleges. It can thus be claimed that since 1969 preprimary education was part of the education system for whites (Webber 1977 p96). The lack of similar provision for other population groups was a matter of deep concern for all who concerned themselves with the plight of young children (Webber p91).

So far some important issues have been revealed:

- * the great need for nursery education
- * the role played by private initiative
- * the problem of enough qualified teachers
- * the struggle to get state subsidy

These issues were, however, to be observed in the second phase also.

The need for more co-ordinated preprimary services in South Africa has long occupied the attention of concerned South Africans. This is closely connected with the much debated issue of **state provision** of preschool education. As mentioned earlier it took a long time before preschool education was recognised in South Africa as deserving state subsidy and then only in limited ways. Le Roux (1980) welcomes the upsurge in interest in preprimary education as from the seventies, but says sound pedagogic foundations are lacking. There is no uniform policy regarding subsidies, salaries, curriculae or approach. Van den Berg and Vergnani (1986) made an important contribution to stimulate thought on the policies for the provision of preschool education in South Africa. According to them state provision is totally inadequate, fragmented and inversely proportional to need. It further insists on inflexible and unrealistic standards, lacks co-ordination among segregated departments and lacks democratic participation (pp52-67). Only small percentages of preschool children are taken care of; as recently as 1980 the position was as follows: 16,07% of white, 0,37% of black, 3,54% of coloured and 0,57% of Indian children were in preschool institutions (Reilly and Hofmeyr 1983 p74). In 1984 Short reports that the following percentages of children would find preschool opportunities: 4% of coloured, 0,6% of black and 3% of Indian children. Figures provided by Van den Berg and Vergnani (1986) show that no more than 2,5% of the total of all under-six children in all population groups

are catered for. When the non-state provision is also included no more than 2,04% of those children not classified as white (excluding the independent states) receive some sort of preschool care (p54). The poor sectors of the population which need preschool stimulation most, are overlooked (p49).

Van den Berg and Vergnani (1986 pp11-34) further identify certain general principles for the provision of preschool education. These principles will now be mentioned briefly and referred to again later in the chapter.

They suggest that the provision of quality preschool services will give tangible recognition to the importance of the early years for individual development, for equalising educational opportunity and for development of manpower resources. The development of the young child should, however, be supportive of family life and integrated with adult education and community development. Furthermore, it should not be seen as separate from social, political and economic realities and both the state and private enterprise should assist parents in the early education of their children. To ensure a comprehensive understanding and adequate policy formulation, official authority should not be fragmented among different departments and priority should be given to areas of greatest need and poverty. A more tolerant approach towards standards of provision would allow more scope for democratic participation and extension of services.

In the 1980's some other important reports regarding preschool education were published. More detailed information on the present stance of preschool planning and provision can be obtained from these sources.

The Wiehahn Commission Report on labour relations (1982) recommended extensive provision of and increased subsidies for childcare services for working mothers.

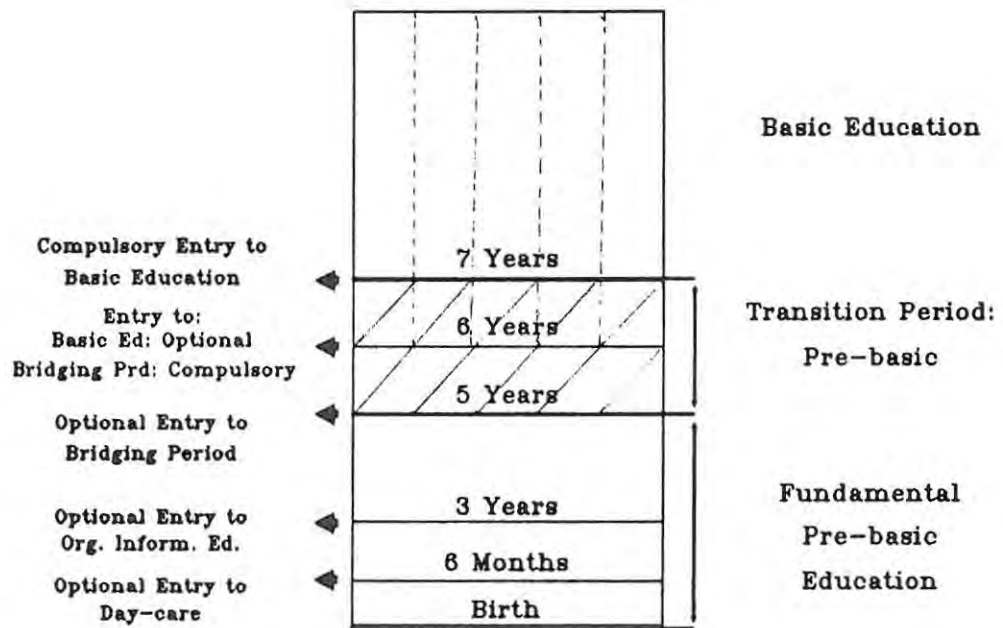
The HSRC Investigation into the Provision of Education in the Republic of South Africa (De Lange 1981) restricted its views on preschool provision to education as such and proposed the introduction of a Bridging Year for five and six-year-olds at primary schools with the view of promoting school readiness. The report stresses the need for deliberate intervention in the preschool years especially of those children who are environmentally handicapped so that they can learn skills and attitudes needed for success at school. This means that strong emphasis should be put on school readiness and programme developers should consider the following in the development of programmes:

- * the needs of different cultural groups vary and should be catered for, but there are common factors for all
- * the learning style of environmentally handicapped children must be specially considered
- * school failure and underachievement must be reduced by suitable school readiness programmes
- * environmental disadvantage must be compensated for
- * curricula must be informal but manuals should provide comprehensive guidelines.

The provision of nursery schools at state expense was not a priority and seen as an unrealistic undertaking.

In the White Paper on the Provision of Education in the RSA (1983), the government accepts the recommendations regarding pre-basic education. Promotion of school readiness during the bridging period of one or two years is regarded as so important that the government accepts financing such pre-basic education as a high priority. A period of fundamental informal education (birth - 5 years) is to be followed by a transitional pre-formal period (5 - 7 years). Pupils will be in the bridging class attached to a primary school for one or two years depending on their state of readiness to enter basic education. It will not be compulsory for 5-year-olds. For 6-year-olds who are not found school ready, it will be compulsory (DET 1986 p99) and basic education is compulsory at the age of seven. (See Figure 1.) The recommendations are, however, not yet fully implemented.

Pre-basic Education The Bridging Period as Preparation for Basic Education



Source: Adapted from De Lange, 1981, and
Reilly & Hofmeyer, 1983

Figure 1

The Reilly-Hofmeyr HSRC Report on Preprimary Education in the RSA (1983) regards the provision of preschool care as an "urgent necessity" and recommends that it should become a "matter of general policy" (p124). There should be a comprehensive full-day programme "including health care, welfare services and education in its broadest sense" (p124). A policy of positive discrimination is recommended to give precedence to disadvantaged areas, which should be determined by poverty, parents' level of education and the percentage breadwinners who were mothers (p132). A movement away from the rigid standards and regulations that have been obstacles in establishing a more extensive service by the private sector, is suggested. Van den Berg and Vergnani (1986 p68) agree fully with these views. Standards insisted on to qualify for subsidies are not realistic in the face of the poverty of communities needing subsidies most. The regulations sometimes inhibit non-state initiatives. Local conditions in a state like Bophuthatswana have forced the reduction of physical standards required to the three basic aspects of a form of shelter, toilets and water in the immediate vicinity.

The question of state funding is addressed in a Submission by the Director of the Early Learning Resource Unit to the Second Carnegie Inquiry into Poverty and Development in Southern Africa, 1984. It asks for a more flexible state funding policy to meet the needs of communities. It focuses on the importance of the family and need for home-based and parent-orientated programmes and community self-development with financial support from the state. In a Summary Report on the Seventh South African Seminar (1984), which was sponsored by the Bernard van Leer Foundation, Short includes extensive recommendations that could have far reaching effects in the preschool field. The role of the state, private sector, community and parents is addressed (Van den Berg and Vergnani 1986 p146-8).

In the past there was little concern for more comprehensive approaches that would also have a positive influence on the whole community and family life. The recent Population Development Plan of the Department of Health Services and Welfare, however, promises to address community development and at the same time involve the community itself (Van den Berg and Vergnani 1986 p66).

One of the generally accepted principles throughout the world regarding preschool education, as also shown by Van den Berg and Vergnani (1986), is that **parent education** is important in matters pertaining to preschool children, because preschool education should be family-based. This is often undertaken by means of talks, slides and making reading matter available. The production of television programmes for parents and for preschool children to improve education in the home was recommended by Reilly and Hofmeyr (1983 p32). The DET plays a role in the compilation of programmes in that their officials are consulted in the preparation of programmes.

Provision of preschool education by the **Department of Education and Training (DET)** is slow but progressive. The DET has given serious consideration to the suggestions made by de Lange (1981), Reilly and Hofmeyr (1983), and the Science Committee of the President's Council on informal and non-formal education in the Republic of South Africa. It is argued that any inequalities in home environment should be eliminated before basic education starts so that the child can realise his full potential (DET 1986). To have as many children catered for as possible, the Department of Education and Training subsidises private establishments with R100 p.a. per five-year-old child. By October 1985 the DET had 112 registered preprimary schools (of which six were on farms) and 126 preprimary classes for five-year-olds had been established at primary schools. Altogether 13 468 children and 516 teachers (of whom 64 (12,4%) had preprimary qualifications) were involved.

It is not always easy to obtain information about the **independent states** and **self-governing states**. With limited funds for educational development, the education departments tend to improve primary, secondary and post-secondary education as priorities and the growth of preprimary education has virtually been dependent on the private sector. QwaQwa, Gazankulu, KwaZulu and kwaNdebele had a total of 39 formal preprimary schools in 1985 although as recently as 1981 there was none. Of the 76 teachers employed, however, only one had preprimary qualifications (DET 1986). A more detailed account of development in the Ciskei follows in Chapter 8.

Control in some form is needed in any organised activity. It depends on the nature of the undertaking what forms of control are necessary. In South Africa nursery schools affiliated to the South African Association for Early Childhood Education (SAAECE) are visited by inspectors from this body; those registered with and subsidised by the Education Departments, are inspected by provincial inspectors. To bring preschool institutions under state control, a proclamation was made in April 1969 by the Minister of National Education that inspection was to be carried out also in those institutions not subsidised by the Department of Education (Oosthuizen 1971). If not registered with the Education Department and accomodating more than six children, nursery schools must be registered with the Department of Social Welfare, in which case inspection does not concern any educational aspect (Heyns 1967 p6). Educare Centres established in less privileged communities are run by the executive committees. Staff of Early Learning Centres that have trained para-professional staff for Educare Centres, carry out follow-up visits to the centres to make sure that correct procedures are followed.

We see that, according to state policy, the services are segregated and control is divided among a variety of authorities. A paper read by Davids at the 1984 SAAECE Symposium argues for decentralised control by Regional Boards using Educare Advisors as guides on local level, but operating under an umbrella Foundation for Child Development. Reilly and Hofmeyr (1983) proposed a statutory Foundation for Child Development under a single ministry to co-ordinate all preschool work at central, regional and local level (p128). A system of registration, inspection and guidance is needed to safeguard standards and promote effective parenting (p131). Independent states should have similar structures.

In the first part of this chapter we have shown the enormous contribution of private initiative as opposed to state intervention and that real progress will be hampered if too heavy reliance on the non-state provision continues. Figures cited by Van den Berg and Vergnani (1986 p55) from the Statistical News Release P23 for 1985, still show the overwhelming contribution of private initiative in the provision of preschool services. A summary of their table is presented in Table 5:1 ('black' excludes national and independent states.)

Table 5:1 Provision of Preschool Services

Type of Institution	Number of Children in each Population Group			
	White	Coloured	Asian	Black
Preprimary schools				
Provincial/state	11 149	80	-	-
Private	63 303	9 879	2 233	11 218
Creches	20 001	4 838	185	16 864
After-school centres	8 403	4	-	111
Preprimary classes at schools	5 744	1 044	-	2 570
Total	108 600	15 845	2 418	30 763
% of preschoolers	20%	3,3%	1,7%	0,6%

The percentages were calculated from number of children in the 0 - 6 years bracket, cited by Van den Berg and Vergnani (1986 p42).

According to the 1985 Annual Report of the Department of Education and Training there were 13 468 pupils in preprimary classes attached to primary schools in the RSA and 3 819 in the self-governing states. It is not clear why the Central Statistical Service figures differ in this respect.

In the absence of state provision, **private initiative** is responsible for supporting communities to provide some kind of preschool care for their children. The total provision paints a dismal picture. Furthermore, unqualified staff shoulder the task and are dependent on the non-state sector for para-professional training, for which no state support is received.

Non-state organisations often face problems such as funding, lack of state aid for buildings, scarcity of trained staff and training facilities. Van den Berg and Vergnani (1986) list 43 organisations' involvement with preschool care in urban and rural areas (p72-117). (Many more were contacted but did not respond). Grassroots Educational Trust which assists communities to establish their own preschool centres, the Early Learning Resource Unit (ELRU), which conducts training programmes and provides training material, and the different Early Learning Centres play

vital roles in supporting private preschool work. The Bernard Van Leer Foundation, an international organisation based in Holland, that funds early childhood education programmes for less privileged children, plays an appreciable part in the provision of facilities in South Africa also.

A report on black preschool facilities in greater East London area and Ciskei (Nicol 1980) that revealed the immense need for preschool care in the indicated area, served as motivation for starting an Early Learning Centre for the Border area. The functioning of the Border Early Learning Centre (BELC) is totally dependent on contributions from sponsors from the private sector. More detail about the BELC follows in a subsequent chapter.

The Centre for Social Development at Rhodes University received a joint allocation with the Border Early Learning Centre from the Van Leer Foundation and started a Rural Preschool Project in 1983. In November 1986 it was extended to include the Rural Outreach Preschool Programme in which eleven farm groups, as well as the Bathurst Preschool, are participating. The Van Leer Foundation promised R90 000 over four years (Long 1987) for the project. Finance for these projects comes largely from commercial and industrial firms and from trustees. Van den Berg and Vergnani (1986) regard it as the responsibility of the state, commerce and industry to assist parents in the upbringing of their children.

Associations for preschool education play an important part in providing and organising preschool facilities, but also contribute to the cause by way of symposia, discussions, literature and criticism. A report on the 1984 ASPECT Workshop (Association for Preschool Education Care and Training, an affiliate member of the SAAECE) was a response to the HSRC Report on Preprimary Education in South Africa (1983). Areas that were still in need of urgent attention in the eyes of the sub-committee were (1) types of services for preschool children to be properly distinguished (2) provision and management to be outlined and (3) staffing with different levels of training to be introduced (Ulster n.d.).

The different bodies involved in providing preschool education vary greatly in the type and quality of service. It was proved in more than one case, that a community with limited resources but with positive parent-involvement and committed teachers with appropriate in-service

training could provide high quality preschool services. It is a pity that there is very little co-ordination among the different bodies to extract more support and concern for early education on a nationwide scale. A "regional co-operative structure involving all those committed to preschool provision and a national information clearing house and networking agency for the preschool child" has been recommended by Van den Berg and Vergnani (1986 p195 p25) in support of their principle regarding the comprehensive nature of preschool provision.

Community involvement is seen as a cornerstone of successful preschool education. Grassroots Educational Trust was founded in 1972 in Cape Town to assist needy communities to start Educare Centres. This trust has accomplished an enormous task in getting communities involved. They make use of what Davids (1984) calls the 'Survival Dynamic', operative in poor communities. The people have learnt through everyday hardships to counteract their difficulties. By taking the responsibility of running a preschool centre upon them, the parents also benefit greatly by the programme. They learn to act autonomously and feelings of competency and selfworth are created. Only when a community expresses its need for a preschool centre, does Grassroots respond - it must be a felt need and not something that is superimposed on the community. The Agency then renders practical assistance in the running of the centre. Attendance of community workers at executive committee meetings is only in an advisory capacity. To help the community to overcome feelings of incompetence, a series of six Educare Handbooks were published with specialist information about the administration of a preschool centre (Davids 1984). The preschool project not only benefits the children, but a whole community. This is in line with the principle Van den Berg and Vergnani (1986) defend in considering a policy for preschool provision. They see strategies for the development of the young child as interlinked with community development (p23). The expertise in managing their own preschool is hoped to be transferred to other areas of community life. The initial Grassroots budget of R50 a year when the work was started, has increased to one million rand presently (Cape Times 31/10/86).

Another principle of Van den Berg and Vergnani (1986) for the provision of preschool care that is demonstrated in the new patterns of growth, is the need to support and protect the role of the family in performing its function. In a paper delivered in 1982 at the Fifth Southern Africa

seminar, Arango and Nimnicht focused strongly on self-help and self-reliance in families and communities. As many children as possible should be served by making use of parent programmes, existing facilities and community involvement (Van den Berg and Vergnani 1986 pl36). A draft memorandum by Short, director of ELRU, suggests assistance to parents to care for and educate their own children more effectively. Preschool "motivators" should make the community aware of the needs of their young children (Van den Berg and Vergnani 1986 pl48).

Regarding black communities, Rhenoster (1971) ties the idea of community involvement to the traditional idea that the children belong to the tribe and the tribe is responsible for them. Not only the parents, but the tribal authority should be involved. Kindred (cited in Rhenoster 1971 p57) holds that citizen co-operation and participation is the heart of any dynamic programme. The idea that community development centres can play a vital role in the successful institution of preschool intervention in developing countries, is upheld by De Landsheere (1977).

Bodenstein (1983) reports on the success the Bophuthatswana Preschool Education Committee had in launching a nationwide early childhood education programme based on parent involvement. Parents serve on the Committee for Early Childhood Education together with experts and officials and all parents were asked to contribute R2 per year to the Early Childhood Education Fund. Resource Centres are to be erected in each of the twelve districts to offer courses to improve parenting, improve existing preschool care, train voluntary mother-educators, motivate the community to become involved, offer workshops and support preschool centres. Parent and community involvement in all stages of planning guarantees acceptance of the idea and implementation of ideals. In two years 83 day-care centres were started by various bodies (parents, state departments, churches, private initiative) in various kinds of buildings (huts, two-roomed houses, church buildings, modern preschool buildings) with qualified staff or para-professional parent-staffing. Many more communities are negotiating with tribal authorities and state departments to provide for hundreds of children waiting for the opening of their preschool centres. This growth trend demonstrates the validity of Van den Berg and Vergnani's (1986) principle of flexibility of standards and variety of provision.

The President of Ciskei similarly stressed the importance of community involvement when launching the Rural Development Programme in August 1982. Cornerstones are the village committees, community action and self-help that will result in community pride. The implementation of this idea is discussed more fully in Chapter 8.

The problem of training staff for preprimary education when the nursery movement started in South Africa was raised in the first part of this chapter. Training needs to be considered also in the period of some preschool expansion. Training facilities for whites are presently readily available. Various post-matric courses are offered full time at some universities: a 3 year diploma course in nursery school education, a 1 year specialisation course after certain degrees/diplomas and a 4 year combined BA degree and diploma course in nursery education. In training colleges a 3 year special course and a 1 year course after a degree or diploma are offered.

Training for blacks provided by the state is limited. In 1981 there were 17 candidates for preprimary training under the DET; training was then temporary suspended until 1985. Only two DET institutions offer the Primary Teachers' Diploma (PTD) (Preprimary). Until 1985 it was offered at the St Francis branch of the Cape College of Education, before it was transferred to the Western Cape College of Education in 1986. In that year 96 students were enrolled. It is also offered at the Soweto College of Education. The self-governing states QwaQwa, Gazankulu, Kwazulu and KwaNdebele had one institution each offering PTD (preprimary) (DET 1986). The intention to start professional training in Ciskei was expressed by the Minister of Education in his policy speech (Pityi 1987).

Because the handling of preschool children demands thorough knowledge of the developing child, both theoretical knowledge and practical experience with children are very important and selection of teachers should be done carefully (Olivier 1976 pl44). The introduction of the bridging year will bring a rapid increase in preschool provision, and the need for properly trained teachers to handle these bridging classes is urgent (Van den Berg and Vergnani 1986 pl64).

The Teacher Training Section of the DET is involved in the implementation of the bridging period through "Project Prepare". Students at Vista University undergo a two-year training course at the Soweto campus for handling bridging classes. In Soweto 39 of the classes at primary schools are used for practice teaching for students from Vista University. In the mornings they teach preprimary classes under the supervision of a lecturer and attend lectures in the afternoons and evenings. A committee from the community pays their salaries. They receive a Certificate in Early Childhood Education on successful completion of the course (DET 1986).

Training problems are, however, not yet solved. Apart from the professional training of teachers, training of **para-professional staff** is a broad foundation on which a large segment of preschool work is built. This training is almost totally dependent on the private sector and is of vital importance for especially black communities. The Bernard van Leer Foundation has been mentioned as playing a major role in supporting private initiatives in South Africa. In the 1970's the Foundation started Early Learning Centres (ELC) to aid early childhood education, especially in training para-professional staff.

In South Africa the first ELC was started in Athlone in 1970, followed by Entokozweni, Johannesburg in 1973 and Chatsworth, Natal in 1976. Serving Ciskei, the Border Early Learning Centre (BELC) was started in East London in April 1982, followed by the Port Elizabeth ELC in February 1986. A Viljoenskroon farm project, Ntataise, in the Orange Free State, is also sponsored by the Van Leer Foundation for training of staff. When the project was started the initial support was for paying teachers' salaries and providing equipment (Long n.d.).

In-service training is facilitated by making relevant literature available. Grassroots Educational Trust in Cape Town has published a series of six handbooks to help communities establish their own Educare Centres and provide elementary training (Cape Times 31/10/86). The Early Learning Resource Unit (ELRU) provides guidance in the running of preschool work. The incidence of 75% untrained staff in centres for black and coloured children in greater Cape Town initially made staff of ELRU aware of the need for in-service training. A workshop programme in itself did not produce desirable effects because participants had no

previous training. They then developed and published a series of textbooks for the Teacher Aide Training Programme, consisting of Supervisors' Guides and Workbooks for students to enable supervisors to train their own staff (Short and Van der Merwe 1985). Part-time training programmes for preschool supervisors in Cape Town are run weekly with a two weeks full-time session and for supervisors from outside Cape Town, a four weeks intensive course is offered. For untrained preschool assistants in-service training programmes are offered on a weekly basis with quarterly workshops. These ELRU programmes are used throughout South Africa (Short 1981). Van den Berg and Vergnani (1986 pl29) report that 1182 people have so far been trained by ELRU programmes.

Training needs to be speeded up to produce more teachers to bring down the teacher:pupil ratio. The HSRC Report (1971) indicates a ratio of 1:18 but Slabbert (1976) mentions a gross teacher:pupil ratio for South Africa of 1:100 and stresses the demand for more para-professional staff apart from professionally qualified staff. He argues for the following levels of training to overcome the problem: Supervisors: diploma/degree + 1 year training; teachers: Std 8 + 2 years training; teacher aides: Std 6 + 1 year training; creche aides: std 6 + 1 year training.

The 1983 HSRC Report on preprimary education in the RSA (Reilly and Hofmeyr) suggests four levels of training: an advanced course (m+3/4), a standard course (m+3), an assistant's course (m+2) and an aide's course (Std 8+2). It also stresses in-service training and the provision of bursaries for preprimary education (pl30).

At the SAEECE Symposium in 1984 Rickards, the director of Grassroots Educational Trust, read a paper that outlined, as she envisages, training of staff needed for the different kinds of preschool provision. Level 1 (the Educare adviser) would need m+3/4 + 1 year diploma, level 2 (the preprimary teacher) would need m+3/4, level 3 (the teaching assistant) would need std 8 + 1 year or std 8 + 2 years part-time in-service training and level 4 (the Educare worker) would need maturity or std 6 + 1,5 years in-service training (Van den Berg and Vergnani 1986 pl44).

The vast number of children in all population groups throughout the RSA and independent states waiting for the opportunity to join in organised preschool activities necessitates immediate and thorough planning of training on the highest level.

Another area that has been closely connected to preschool education in the beginning years, is that of health care. In the 1930's the link between health and educational development was stressed in both the New Education Fellowship Conference and in addressing the Poor White problem. Health control and nutrition have emerged strongly as important facets of preschool education. In South Africa with its divided control, there is no one body responsible for medical care in preschools. The HSRC report of 1971 recommended organised medical care. De Lange (1981) also devoted a special section to the need of health care.

The feeding scheme attached to a preschool, especially in poor communities, fulfils a most important role. Sims et al (cited in Margo et al 1976) see the nutritional status of children as the end result of family influences. Poor cash incomes often lead to malnutrition which seriously hampers the child's potential to give attention and may lead to a state of apathy with a low level of awareness (Reilly 1983). However good the programme may be, the child cannot benefit from it if he is not properly fed. Malnutrition, as defined by Fincham and Thomas (1984 p1), is a condition resulting from energy deficits and inadequate protein intakes that increase susceptibility to infection. In our special area of interest, the Ciskei, the high prevalence of pellagra would not be remedied as long as maize remains the staple food (Visagie, quoted in the Quail Report 1980 p30). Ferron (1983 p4) indicates the serious damage to the central nervous system when a lack of Vitamin B results in pellagra. Long term physical and intellectual growth are affected by malnutrition.

In Ciskei local Village Health Workers get a rudimentary fortnightly training offered by a Staff Nurse. They should be able to identify cases of malnutrition when they visit preschool centres on a daily basis. Fincham and Thomas (1984) are concerned that generally nurses don't realise the importance of the growth-nutritional status relationship and overlook cases of malnutrition even when weight-height-age particulars show inconsistencies. Apart from the important aspect of nutrition, immunisation records are often checked and the general well-being of the children monitored.

In this chapter the practical implementation of early childhood education in South Africa has been examined. The product of this intervention, in terms of one of the specified aims in some of the models, namely school readiness, needs further clarification. This will be done in the next chapter.

CHAPTER SIX

SCHOOL READINESS

The problem of low attainment and of pupils who have to repeat classes has been shown by researchers to be connected with the problem of school readiness (sometimes called "school unreadiness") at the time when the child starts his formal education. For some pupils, the beginning of school is also "the beginning of a pattern of failure" (Du Plessis 1981 p12). Getzels (1966) maintains that many lower class American children have limited preschool experiences and they are not sufficiently prepared for the demands of school. Such children may be greatly frustrated because of their inability to perform according to expectations. Feelings of hopelessness may result in withdrawal and ultimate dropping out (p223). It is often claimed that if a preschool programme could help to reduce the discontinuity between home and school, pupils' first year in school could be a much more enjoyable experience.

The school beginner in a developing country could be expected to experience an even greater degree of discontinuity as he enters a foreign world of book learning and encounters symbols unfamiliar to him. The problem of school readiness in this case is not restricted to some individuals or a minority group in a community whose background compares unfavourably with the rest of the beginners' class. Instead, it might encompass virtually the whole population of school beginners. In South Africa and its neighbouring independent states, with areas reflecting third world conditions, the problem of school readiness gains new dimensions. As has already been mentioned in Chapter 5, the Human Sciences Research Council's Investigation into Education (De Lange 1981) addresses this problem in depth.

This chapter is concerned with an examination of the idea of readiness, a brief survey of the test instruments to determine levels of readiness and the programmes which have been devised to provide an environment in which all appropriate aspects of readiness can be developed.

In a discussion of school readiness the concepts of **development**, its two components **heredity** and **environmental learning**, **maturation** and **readiness** are relevant. Some educationists see development as a biological process that reflects quantitative growth only (Gesell cited in Van der Spuy 1966 p28) while others see it as a total process of qualitative change (Millard and Hugget cited in Van der Spuy 1966 p28). The child's abilities and attainment are to some extent related to heredity, but are not exclusively governed by it. This point has already been considered in Chapter 3 when the nature-nurture controversy was discussed. It became clear that the environment interacts with the potential abilities of the child. Spontaneous development and stimulation from the environment both play a role in formal and informal learning (Garbers 1966 pl08). When hereditary traits are unfolded, without specific teaching, **maturation** takes place and provides the scope within which learning can occur. **Maturity** implies physical and neurological growth which cannot be speeded up in any way. Fabian (1985 pl8) cites Ausubel's view on maturation which he describes as "a function of genetic influence in the absence of specific practice experience". Garbers (1966 pl0) and Theron (1975 p42) also support this definition, and Garbers then adds to this the concept of **school maturation** as that "level of physical and psychical development of the child at which those possibilities become available that are indispensable **preconditions for school success**" (1969 p49).

According to Trow (cited in Van der Spuy 1966 p37), **readiness** is based on the degree of physiological development (maturation), previous experience (learning) and goal-directedness, which could also be described as a specific aspect of motivation. Whittle (1982) adds the important category of genetic factors to Trow's list. These factors are substantiated by Ausubel and Robinson (Super 1979 p8). Readiness has a specific application in the school situation and is referred to as school readiness. Seyfried (1969 p21) defines school readiness as that stage in a child's intellectual, emotional, social and physical development when he can benefit from class instruction successfully without too

much difficulty. Fabian (1985 p17) stresses the fact that school readiness is a global concept, involving all aspects in Seyfried's list, in that it reflects the development of complicated combinations of attributes, both innate and acquired. These aspects will be looked at separately, although it is the interaction of these which contribute towards a school beginner's readiness to make the transition from play to work and to adjust smoothly to a new environment of formal learning.

A very important physical aspect of school readiness is that of **motor co-ordination**. All authorities stress that motor co-ordination should be reasonably well established before formal learning starts. It includes the following aspects:

* **Body image:** the child must have a sense of **laterality** in knowing the left and right side of his body before knowing right and left outside of himself. This limits confusion in the order of numbers or letters (Grove 1978). **Dominance** refers to the preference given to using one hand or side of the body to the other. The establishment of dominance is important for many aspects of learning and for prevention of reversals in reading or writing. The child who has problems in moving over the **middle line** of the body may encounter serious writing problems in the sense that his right hand has moved to the left hand side of his body as he begins to write from left to right.

* **Balance** is the basis for a good sense of laterality and the accompanying sense of position in space and helps in activities where left-right movements are carried out (Grove 1978).

* **Gross motor control** is needed for all physical activities. It precedes finer motor control and is practised in many games where big balls are caught, by jumping, skipping or hopping and is important in balancing. If gross motor control has not been established well, the child will not be ready for finer motor skills which are highly relevant for writing.

* **Fine motor control** occupies a very important place in class room activities where the child has to use the muscles of the hand very accurately. Accuracy, speed and co-ordination must be developed (Jooste 1976 p65). Lehobye (1978) points out that the mastery of motor skills depends partly on physical maturation, but also on training, e.g. whether the child has been exposed to experiences which would develop and practise these skills. In many third world homes, some aspects of fine motor control are not developed because of a lack of opportunity to use pencil and paper.

* Co-ordinated **eye movements** from left to right are needed for learning to read. This is an aspect of fine motor control. Preschool children normally do not have this skill and need some preparation (Garbers 1969). The eyes must not only become accustomed to move in concert, but also change focus in accommodation from far to near.

* **Hand-eye co-ordination**, another fine motor control aspect, is necessary for many activities. The mastery of writing is closely connected to hand and eye movements. Steenekamp's research (1971 p229) on visuo-motor perception predicts that a child who performs lower than six years on the age-equivalent scale of the Bender Gestalt Test, (which tests the ability to recognise and reproduce figures) will have problems in learning to read and write.

Sensory input and the interpretation of sensory stimuli should be of high quality for the child to benefit from any instruction. Fabian (1985 p21) claims that sensory stimulation is basic to all cognitive aspects of learning readiness. Perception, concept formation, language and thinking are dependent on sensory stimulation. In fact, it is at times difficult in infancy and early childhood to separate physical aspects of sensory input and the intellectual or cognitive aspects of perception.

It is, therefore, appropriate to consider next the significance of **intellectual readiness**. Perception is basic to all learning; if the sensory input is not interpreted correctly, it is of no use. Grove (1978) cites various authorities who stress the importance of perceptual development between the third and seventh year. Frequently cited criteria are the abilities to analyse and synthesise, to use creative abilities, to see cause and effect, to use associative memory, to master elementary number concepts and to develop language proficiency. Van Dijk (cited in Van der Spuy 1966 p16) suggests that not only the intellectual ability, but also the level of concentration gained, and the speed at which a child can complete an intellectual task, are other important aspects of intellectual readiness.

One of the most intensely investigated areas of perception is that of **visual perception**, which implies much more than simple acuity of sight. Visual perception here may be described as the brain's ability to interpret visual stimuli. The Marianne Frostig Development Test for Visual Perception, for instance, measures development in five important areas, especially for learning: eye-hand co-ordination, figure-

background discrimination, form constancy, position in space and spatial relationships. Frostig and Horne (cited in Grove 1978) explain that only a few selected stimuli from the mass of incoming stimuli can be processed by the human brain at any one time. The child must, therefore, be able to organise himself cognitively by selecting the foreground against the background. Spatial orientation is needed to know the relationship between the person himself and any object being behind, above, under, or in front of him and is an important requirement in mastering mathematical concepts, where sequence plays a role. Steenekamp's results on the Frostig test in samples of Bapedi, Tsonga and Venda school beginners in Sub A and Sub B showed an alarming lag in visual perception. None of the groups attained the "normal" score of 10 and all were classified as needing therapeutic help. This occurred in spite of the subjects' fairly high scores on the eye-hand co-ordination test. Results on the Bender Gestalt and Goodenough-draw-a-man tests also revealed similar lags. School beginners with an average age of as late as 7.2 years had not reached the desired development in visual perception apparently necessary for successful mastery of reading, writing and arithmetic. Because conceptual learning cannot develop under these conditions, Steenekamp sees this as a possible cause for parrot learning in many black schools (1971 p237).

Auditory perception is as important as visual perception. Many authors stress the importance of good auditive perceptual abilities for language development (Grove 1978). Munroe, for instance, found that Grade 1 children who could not master reading, had more mistakes in auditive discrimination exercises than those who successfully learnt to read. To be effective, good hearing must be accompanied by auditory memory and auditory association.

Hildreth (cited in Lehobye 1978) stresses the importance of **mental maturity** for academic learning. Reasoning and problem-solving abilities should be well established. Because judgement and drawing of conclusions are so important for school learning, causal thought must have developed satisfactory. Intellectual maturity is dependent upon at least four factors: the pupil moving beyond egocentricity, so that communication with other people is possible (Haenen 1970); the detection of relationships and symbol functions needed for reading and writing (D'espallier and Peeters cited in Cronje 1980); the ability to interpret a

sign or symbol as replacement for an object (Hetzler cited in Van der Spuy 1966 p169); and meaningful memorisation so that content is internalised and can be recalled later on. Research results obtained by Bigelow (cited in Lehobye 1978) show that **mental ability** should be considered when looking at chronological age for determining school entrance. He found that with an IQ of 110 a child younger than six years old would not succeed in the first grade. If his IQ was higher than 110 he had a reasonable chance; with an IQ of over 120 he would show good scholastic progress but could have social or emotional problems. If the child is, however, between six and six-and-a-half, he had a good chance of succeeding with an IQ of 110. It is important, however, not to link an IQ score rigidly to levels of performance in the early school years. It will be suggested later in this chapter, however, that readiness (or the ability to cope in the early years of school) is itself linked with the level of the demands made by the school programme.

Because language is the medium for thought processes and for expression, the child's language development must enable him to follow explanations and put his thoughts across to others in understandable terms. Fabian (1985 p23) cites Piaget's emphasis on the role of environmental factors in cognitive growth. Stimuli from his environment motivate the child to name and classify articles and objects. He learns how to communicate, he asks questions and develops his language ability.

Du Plessis (1981 p13) claims that a child learns only if he can relate the new knowledge to existing knowledge and make it meaningful in this way. The school beginner should already possess powers of differentiation, conceptualisation and auditory and visual memory. The capacity to name, label, communicate and question is vital (Bakara 1970). By age six a vocabulary of 3 000 words should have been acquired (Jooste 1976 p127). As was suggested with Bigelow's link between IQ scores and learning success, however, a rigid claim of a minimum vocabulary of so many thousand words, needs to be taken with caution. The programme itself will determine whether the vocabulary store of the pupil is adequate for his success. Nevertheless, some basic vocabulary level is an obvious pre-requisite for reading.

The more stimulation a child gets from his environment, the faster his language development will be. Absence of parents, who are forced to work away from home, deprives small children of models in language

development. There is little or no time for reading or telling stories to stimulate the imagination and foster skills of concentration and listening, understanding and responding. Rural families in Ciskei experience a high incidence of absent fathers and even of absent mothers: it is as high as three out of four men and one out of two women in the Amatola Basin (Bekker and de Wet 1982). Bereiter & Engelmann (1966) found that the environmentally deprived first world child shows a developmental lag of one year at the age of five, but that it increases, especially in language and reading skills, to a lag of four years by the time such a child has reached secondary school level. It is to be expected, then, that this adverse effect will also hold for the third world child.

Research has revealed the important part played by language in concept formation and problem-solving. Without language, thought is impossible, emotions cannot be expressed nor can abstract ideas be discussed. The social function of language is also important. The child must be able to speak correctly, answer intelligently and follow a conversation, i.e. communicate freely (Vygotsky cited in Kruger 1984).

Apart from physical and intellectual readiness, social-emotional readiness is another requirement for adjustment in the school situation. Potgieter (1961) cites the opinion of Piaget that the younger the child is, the higher the coefficient of egocentricity and inability to become part of a social group: children who are five years old, operate on egocentric considerations 50% of the time. The school beginner must adapt in a group situation, stay away from home for a considerable period of time, form new friendships, suppress impulses momentarily, tackle tasks without undue anxiety and be happy in his new environment, while recognising the rights of other people (Kroh cited in Van der Spuy 1966 and Hetzer cited in Cronje 1980). If the social-emotional development has progressed well, the child is not unduly shy or afraid and joins class activities freely (Jooste 1976 p130). He exhibits perseverance, emotional control and willingness to share the attention of the teacher and be disciplined (Du Plessis 1981 and Kruger 1984). Becoming a happy member in the classroom situation is regarded by a series of researchers mentioned by Garbers (1966 p22), as one of the most important criteria for school readiness. Another aspect of social-emotional readiness is an established self-concept, which is underlined by Van der Spuy (1966),

Lehobye (1978) and Du Plessis (1981). The child is emotionally mature when he feels accepted for what he is.

Some authors regard the social-emotional aspects as more important than intellectual factors, because a child who feels insecure and is too dependent on the parents, finds it extremely difficult to adjust to the new situation of coping on his own (Borich cited in Fabian 1985). Fabian (1985 p33) cites findings that indicate a correlation between academic performance and characteristics such as excessive shyness; fearfulness; overdependence; lack of confidence; lack of control over emotions; and unwillingness to adjust. If these personality characteristics exist, they are contra-indicative of true school readiness.

Authors agree that **personality and motivational aspects** are very important for school readiness, although it is difficult to separate these from some of the social-emotional aspects already mentioned. Authors differ in selecting the outstanding criterion from the many suggested criteria. Bühler's view, that concentration and task maturity is most important, is given prominence by Potgieter (1961), and supported by Garbers (1966) and Grove (1978). This change from a play attitude to a task attitude is also emphasised by Nel (cited in Grey 1957), Van der Spuy (1966 p175) and Gouws (cited in Cronje 1980). Haenen (1970 p43) holds that the will to grow up and learn, thereby accepting the school and subordination to class rules, implies a realising of the task-nature of the school. The child realises that he must accept the strictures and demands of the school (p21). Personality qualities like the need for achievement, competence motivation and perseverance are stressed by Bakara (1970) and Garbers et al (1976). Townsend and Burke (Ramphal 1972 p4-5) refer to "the child's willingness to explore and discover, to learn to follow and be directed, yet still inquisitively develop his own way as he works with the assistance of others". The child is motivated intrinsically because he is eager to know about the world he finds himself in. Penning (cited in Van der Spuy 1966), Gouws (cited in Cronje 1980) and Grey (cited in Van der Spuy 1966) regard voluntary, active attentiveness, and being observant as very important.

Despite the necessity of isolating specific factors which contribute to successful learning, the majority of authors stress the totality and unity of the personality of the child and the **interaction** of all those aspects mentioned above (Seyfried 1969, Theron 1975, D'Espallier and

Peeters (cited by Gouws 1977) and Grove (1978). School readiness, in other words, is an inclusive concept referring to physical, affective and cognitive qualities as well as social readiness to become independent and benefit from class instruction successfully without too much difficulty. Without the necessary biological maturation anatomically, physiologically and neurologically, the child's motivation and inclination for learning do not provide the foundation needed. According to Kruger (1984) the child who is ready for school will understand and give meaning to his experiences, i.e. his sensory information is perceived correctly, his language acquisition and his powers of retention are satisfactory and he is able to give meaning to concrete objects (3-dimensional), pictures (2-dimensional) and concepts (abstract). He is also totally involved, i.e. he has the will to master and to pay voluntary attention and he experiences the situation as pleasant.

The role of learning in gaining readiness is important, especially for those authorities who support the interventionist approach in which the environment plays a major part in establishing readiness. Many authorities e.g. Garbers (1966), Jooste (1976), Gouws (1977) and Fabian (1985) agree that specific experiences and practice of specific skills, attitudes and techniques can lead to a better degree of school readiness whereas school maturity cannot be accelerated because it is the result of a biological, bio-chemical and psychological developmental process.

As has already been suggested when discussing readiness and measured intelligence and vocabulary growth, a very important aspect of readiness is that it is dependent on the demands of the school. School readiness is therefore a debatable issue because much depends on what is expected of the child at school. Readiness points to the effectivity of cognitive abilities at a particular age to master a particular task. The precise school demands actually determine the extent of school readiness (Garbers 1966 and Fabian 1985 p21). It is an on-going matter because readiness is geared towards the immediate learning task; when the child succeeds or learns new things, he is again ready for another task (Keliher 1967).

Super (1979 p9) concludes that school readiness "represents the levels and stages of learning readiness which will give promise of performing at an optimal academic standard imposed by culture and enforced by the school". Garbers (1969) and Grove (cited in Whittle 1982) see school

readiness as a developmental stage which equips the child to benefit from formal instruction and to progress satisfactorily because he is sensitive to the demands of school and can learn systematically in a formalised learning situation. Garbers (1969 p49) says it refers to a "learning and maturational background of the child on the basis of which we can expect that the child, because of his ability and educational situation, will progress satisfactorily in the school situation".

Reilly (1983 p3) also supports this. She stresses the physical and psychological development that enables a child to undertake and complete those tasks demanded from him in a formal school situation. We see the emphasis is on the demands of the school and readiness is therefore a relative term.

Because all the factors contributing to readiness which have been described so far in this chapter are clearly highly influenced by individual differences, a common compulsory age at which school must be started, is an artificial criterion and is likely to mask very wide states of readiness in the pupils. This artificial criterion is of administrative convenience rather than being psychologically appropriate.

Entrance age has become a much debated issue. It can be argued that the right time for a child to start school, is when he is ready to meet the demands of the formal school situation. The problem is, however, that provision for individual levels of readiness is not always made in the formal group instruction at school (Brandt 1976) and chronological age is used as criterion in all countries with compulsory schooling. In some countries, however, flexible first year programmes are used to accommodate children of different developmental levels. In more developed countries the reception classes tend to be smaller so grouping to accommodate differences is fairly easy. The bigger classes in many third world countries make effective differentiation extremely difficult and place heavy organisational demands on teachers.

On the question whether chronological age can be used as the ultimate determining factor for school entry, Garbers (1966 p1), citing information from various overseas countries, stresses the problem of relating

"school unreadiness" at school entry to age. He sees the chronological age criterion for entry as an obstacle. Krech et al (cited in Ramphal 1972) are concerned that six-year-old children in the first grade may differ vastly in readiness and yet in too many cases they are confronted with the same curriculum. Garbers (1966), for instance, states that children who were found ready for formal learning according to performances on readiness tests, ranged from 5 years to 6 years 11 months in chronological age.

Proponents of a set right age to start school make use of the developmental stages in Piaget's theory about thought processes, which are attached to certain age limits: 0 - 2 years constitute the sensorimotor stage, 2 - 6 years the intuitive stage, 7 - 12 years the concrete operational stage, and as from 13 years the abstract thought stage. Piaget holds that cognitive structures are radically different from one stage to the next. Qualitative differences in modes of thinking and of solving the same problem exist in each stage (Kohlberg 1968 p1021). Hunt's interpretation of Piaget's theory suggests definite critical periods in intellectual development related to definite chronological time spans. Kohlberg (1968 p1045), however, holds that Piaget does not tie developmental stages inflexibly to chronological age, but to the child's behavioural level. Contemporary theorists accept the sequence of stages but the length of time a child stays in each stage is apparently determined significantly by the environment, individual intellectual differences and the actual content of what he is learning. When the child's associative learning and intuitive thought structures change to that of concrete operational thought, the child becomes ready for formal instruction.

In practice age limits, by which children must be in school, differ widely in different countries. In England a historical reason can be traced in the system of Payment by Results as from 1860 onwards. Government grants were paid according to attendance and standards gained by the pupils. To prepare the pupil to pass the first standard at approximately age seven, pupils started attending the reception class on or before their fifth birthday. This early entry age has been retained to the present day but the Infant Schools are very informal and are intended to prepare the child for formal instruction, including reading instruction (Almy 1975).

In Scandinavia and Russia geographical reasons for a later entry age can be suggested because the young child was not physically strong enough before he was seven to walk to school during severe winters and the entry age was set at seven. In contrast to the early entry age of Britain and the late entry age of Scandinavian and Russian countries, most countries in the world with compulsory education have chosen 6 years as starting age for more formal schooling. This level applies in most European countries, in the USA and in South Africa where compulsory schooling has been introduced. The point has already been made in this chapter, however, that readiness must be partly defined by the programmes created by the schools. The same point can be made in any discussion on the start of compulsory schooling. As explained in Chapter 4, many European countries have extensive preprimary provision. In Belgium and France, for instance, 100% of 5-year-olds attend nursery school and start some reading to prepare them for formal school at the age of six.

With the extensive development of women's employment in industries in Russia, creches and preprimary schools are frequently found in that country's urban industrialised areas. A very high percentage of American children attend preprimary classes, called Kindergartens in that country. In all these school systems the preprimary classes are used for readiness programmes. It can be argued that the informal approaches of a British reception class can also be compared with a good preprimary or nursery school programme.

Almy (1975) claims that entry age to formal schooling is dependent upon the kind of preschool programme children are exposed to before they start formal schooling. In the USSR and China, for instance, children get some reading and counting experience during nursery school years and only start formal school at age seven.

Van der Eyken (1982) reports that in Europe there is presently a trend to lower the age for starting formal education in the light of the demand for care for preschool children where both parents work. Preschool education has been provided for only half of all children in the 21 countries constituting the Council for Cultural Co-operation. There is, in fact, pressure in Europe for attendance at preschools to become compulsory but in the meantime it is claimed to be better that, in the

absence of conventional preschool facilities, children should attend formal schooling at an earlier age than to having no adequate care at all.

In white, coloured and Indian schools in South Africa, where compulsory schooling has been introduced, the regulations for admission are that no child is admitted unless he reaches the age of six years on or before 30th June of the year in which he starts his formal schooling. He must, however, start his formal schooling at the beginning of the year in which he turns seven (Behr & MacMillan 1971 p140). This regulation has now been enforced for more than two decades. It results in a starting age range of five-and-a-half to seven years in the beginners' classes. As far as black education is concerned, only a very small percentage of children live in areas where compulsory primary education has been introduced. It will be seen that in the geographical area in this thesis, no compulsory schooling exists. The age ranges in beginners' classes are even greater than those commonly found in schools of the other race groups.

Results of studies dealing with the problem often conflict. Some indicate that it is too simplistic to fix on one set age (mental or chronological) for learning a skill, e.g. reading. In America assessment tests for school beginners were produced as early as the 1930's. Morphett and Washburne (1931) used these tests and IQ tests to group grade 1 pupils. They then followed the testees' progress through the first grade. Their conclusion seemed to be very clear: the likelihood of successful reading learning occurring until the child had reached a mental age of 6.6, was very small. For the next 20 years at least their research conclusions were quoted again and again. Schonell (1951), for instance, claims, "The consensus of results from educational research indicates that, for normal pupils, the more formal approach for reading should not begin before a mental age of six is reached". In fact, Morphett and Washburne's research findings had been questioned by Gates as early as 1937. He had examined first grade reading progress in four schools with differing progress and from differing socio-economic neighbourhoods. He found that in the better neighbourhoods successful reading learning could occur at a M.A. well below 6 and that in the poorer neighbourhoods a M.A. of over 7 was necessary to guarantee satisfactory progress. When Gates' figures are considered, it is clear that these mental ages would mask an even wider range of chronological ages.

Gates (1937) also showed, as would be expected, that the programme followed by the schools also played a role in determining first grade success. An extreme example of this comes from the work of Downing (1963). He had been examining a major change in reading methodology -- the use of the Initial Teaching Alphabet. This emphasised a consistent sound-symbol relationship, reinforced by the addition of 20 further shapes to the 26 letters of the conventional alphabet. Downing (1963) claimed that the regularity of this orthography enabled very young children to learn to read successfully, because once they had mastered the consistent sound-symbol relationships, they were able to move rapidly into independent reading. In contrast, traditional English orthography is characterised by major sound-symbol inconsistencies and delays independence of attack upon words. He showed that a significant number of 4-year-olds could master reading when based upon a consistent orthography. If nothing else, Downing's research suggests the extreme importance of considering methodology when discussing entry to school and the programmes which young children follow. Nevertheless, when facing English reading, following some form of look-and-say methodology (by far the commonest approach to initial reading training), a reasonably high C.A. has been claimed to be necessary for success.

Kruger (1984), for instance, mentions overseas research by Cramer (1953), Kaaijk (1961) and Deschesne (1968) indicating a direct relationship between entry age and performance. Pauley's findings (cited in Van der Spuy 1966 p70) on very young children required to begin formal learning, indicate lower than class average performance, more cases of repetition, a higher degree of absenteeism and more personality and social problems. In contrast, all Durkin's writings stress the need for flexible first grade programmes which will enable those with appropriate reading skills to move rapidly into formal reading training (see, for instance, Durkin 1976).

Research in South Africa on this problem is largely restricted to white children and centres on the question if 5-year-olds were ready for formal schooling. They were allowed into the schools of the Transvaal Education Department from 1951. Beron (1960) tested, at the end of their first school year, 500 pupils who had started as five-year-olds and found that 25% of them were experiencing difficulty and inability to

understand simple concepts in word-recognition and number. His further concern was that many borderline cases were promoted to the next class. These pupils were heading for difficulties in their later school careers. Furthermore, the quality of the first grade work was lowered because of many "unready" pupils (Garbers 1966 p118).

In 1954 Schmidt replicated Morphett and Washburne's research methodology, but he used schools in which a fairly structured phonic approach was the current method. He found that many children younger than C.A. 5.9 could make acceptable reading progress, although he had argued earlier for a higher entrance age. In his earlier tests only 12% of boys and 7% of girls above M.A. 5.9 failed to meet the criteria, whereas 31% of boys and 26% of girls below M.A. 5.9 were unsuccessful.

Visser (cited in Grey 1957 p62) claims that only 8% of five-year-olds have a mental age which equips them to cope with Sub A work. Another 17% may manage with great effort, while 75% will experience their first school year negatively.

Jooste (1976 p103) investigated a sample of std 4 and 5 failures. Of the children who had started school before the compulsory age, 50% failed in Std 4 or 5 (i.e. those who started in the range of five years and six months to five years and eleven months). Only 28% of the children who were legally compelled to have started school, failed.

An apparent contradiction to these South African research findings, comes from the Cape Education Department (Stulting 1971 p196-7), where it was shown that the best results in the 1966 Cape Province Standard 10 examination came from pupils who started school in the age group 5.0 - 5.5 years. This apparent contradiction, however, is partly explained by the fact that these best performances came from children with high levels of giftedness. They came from stimulating and supporting homes (both intellectual and affective). Both parents held university degrees and interest in academic matters was high (p201). The milieu, in which they grew up, positively influenced their degree of readiness. For such a selected group early school entry was advantageous. In other words, chronological age has been shown once again not to be the only factor which can account for school readiness.

Greyling (n.d.), Grey (1957) Potgieter (1961) and Garbers (1969) are of opinion that only 5-year-olds of considerably high IQ could progress as well the 6-year-olds; that hundreds of "unready" pupils were admitted at the age of five; that pupils with M.A. five-and-a-quarter were not ready for reading instruction; and that task maturity has not developed well enough in the average 5-year-old (See Bigelow 1935 p63).

Most of the research done in South Africa has shown that the average six-year-old is better prepared for school entry than the five-year-old and he is less liable to fail. In Greyling's samples of 5- and 6-year-old school beginners 12,8% of 6-year-olds, 22,1% of five-and-a-half-year-olds and 35,2% of five-year-olds failed before they reached std 3 (Greyling n.d. p57).

Kruger (1984) has made a detailed study of the relationship between school readiness and chronological age. By comparing the number of Sub A pupils who obtained educational help from non-school agencies, children not yet six-and-a-half were found nearly five times as frequently as children who were over six-and-a-half. A direct relationship between age and need for help is suggested by the following figures: in 1981 there were 7 128 children not yet six-and-a-half who were referred for help whereas only 1 508 were older than six-and-a-half years. In a standard 5 class it was found that by far the majority of failures, i.e. 30%, were admitted to school before they were six years old.

In his 1984 research Kruger constructed a 3-part-scale to measure school readiness. The results gave scores in terms of social-emotional, physical and cognitive readiness. He found that in 80% of the testees social-emotional readiness was reached by as young an age as 5.8, but that an age of 6.1 was necessary before 80% of the testees could reach physical readiness, and that an age of 6.4 was necessary before a similar percentage had reached cognitive readiness. He argued that, by following through pupils' progress, the cognitive score gave the best predictor of success and so pleaded for a very much later readiness age, of 6.4 - 6.6 years, than is stipulated in the current school regulations. He also recommends that children younger than six years may be admitted only if they have undergone a complete school readiness

test or an intelligence test. He further supports the idea put forward in the De Lange Report (1981) of a pre-basic year, as already explained in Chapter 5.

It is clear that many South African surveys stress a relationship between entry age and later school success. It has, however, been frequently argued in this thesis, that these figures have to be seen in the light of the demands of the school.

The implications of these research studies, then, seem to be that although chronological age cannot be accepted as an ultimate criterion for school readiness, it can be accepted as an approximate indicator of possible school success, especially in the first year of formal schooling, on the (unstated) assumption that methodology does not enter into the arguments. It has, however, been shown that this factor cannot be ignored.

Little or no formal work of a similar nature has been done with black pupils. At least two factors must be borne in mind before using arguments derived from experiments on white pupils. Firstly, the orthography system of all black languages is highly regular and therefore some of the arguments advanced by Downing (1963) might seem to apply in these circumstances. Secondly, and on the other hand, this interpretation could be affected by classroom methodology, by the level of theoretical understanding of reading shown by black teachers, and by the environmental experiences which the children have had before they enter formal schooling. All these factors are examined again in Chapter 11.

Closely connected to the issue of readiness is the question of how to determine such "readiness" for school. The use of standardised tests is considered in this section of this chapter.

The general purpose of school readiness tests is to predict how much a child will benefit from formal instruction and particularly in the basic skills of reading and writing. Such knowledge should help the teacher to adapt methodology and teaching materials for the class as a whole and

for group work. Testing is planned to isolate individual learning disabilities and help the teacher to render educational advice at an early age. The importance of such special early intervention and support is underlined by Potgieter (1961), Van der Spuy (1966) and Ramphal (1972).

A few measuring instruments and media used for assessment will briefly be described. According to Garbers (1966 p111) the basic elements in school maturity tests are (a) induction-deduction (b) experiential knowledge (c) structure-analytical perception (d) associative memory and (e) constructive combination.

There are numerous tests available of which many are devised by researchers for specific purposes and are not standardised, e.g. a Preschool Intelligence Test and the Njala Performance Scale developed by Ferron (1972). Standardised tests are divided into General Readiness Tests and Specific Readiness Tests; the former measure a number of different skills like vocabulary, perceptual discrimination, motor skills and comprehension, examples of which are The Metropolitan Readiness Tests of Hildreth (N.Y. 1949), the Gesell Institute Developmental Examination and the Grundleistungstest of A. Kern (Jooste 1976 p133). Specific Readiness Tests measure readiness for specific subjects, e.g. the Harrison-Stroud Reading Readiness Tests and Lee-Clark Grading Readiness Test.

The idea of assessing school readiness by means of standardised tests first emerged strongly in America in the 1930's. A battery of tests, the School Readiness Behaviour Tests (Gesell Institute of Child Development), was developed, over a period of 50 years, at the Gesell Institute to obtain a quantitative measure of the development reached in four major developmental areas: motor behaviour, adjustment/adaptation, social-personality aspects and language. A shift was made from pure IQ measurements to a more general developmental picture. Children are expected to respond spontaneously while the tester notes their natural reactions (Jooste 1976 p9). The battery, for children from five years old to ten years old, includes paper and pencil tests, form tests for matching, memory and right/left recognition. An interview is used to supplement information obtained in the test (Super 1979 p47).

Four well-known tests are valuable for establishing developmental levels of visuo-motor ability. A separate Gesell test on readiness for

writing and reading, in which the testee copies ten geometrical forms, assesses visual perception and fine motor control (Steenekamp 1971 p225). The **Goodenough-draw-a-man-test** was developed to reflect the testee's own body image, the development of which determines his ability to perceive position in space and spatial relations. Age norms from 3 - 13 years are supplied (Steenekamp 1971 p227). The **Visual Motor Gestalt Test of Bender** consists of nine designs, which must be copied by testees, to get a measurement of their visuo-motor gestalt ability. This is associated with visual perception, memory, spatial relationships and organisation (Steenekamp 1971 p224). Koppitz claims it has good predictive value for school success and can be used as a non-verbal IQ measuring instrument but psychologists do not recommend its use to predict individual school success (De Jager 1982). The **Marianne Frostig Developmental Test for Visual Perception** evaluates important areas for meaningful visual perception, e.g. eye-hand co-ordination, figure-background, form constancy, position in space and spatial relationships. The perceptual quotient obtained has been found to correlate highly with the IQ (Steenekamp 1971 p226).

Other well-known general American school readiness tests are the Peabody Picture Vocabulary Test and the Sequin Form Board (Brittain in Frost 1968). In Europe the **Grundleistungstest** was developed by Kern and is widely used in European countries (Garbers 1969). Differentiating ability is tested in six subtests: Scrabble Test, sentence reproduction from the black board, draw-a-man, copying a number gestalt consisting of dots, grabbing a specified number of objects without first counting them and recognition of a number of dots on flash cards. In **Strebel's "Schulreiftest"** all categories, normally used for determining school maturity are included in the 12 tests and it gives a good qualitative picture of the testee. It is not, however, standardised for South Africa. Garbers (1966), however, has used it with great success in his research on school adjustment and found its validity acceptable (p112).

Super (1979) evaluated the effectiveness of the Transvaal Education Department readiness programme on perceptual-motor abilities. His training as an optometrist was put to good use and he developed a Perceptual Development Assessment Device of 100 items. It covered gross motor, fine motor, visual analysis, visual motor, auditory motor, body image and usable knowledge aspects as well as parent and teacher

assessment (p81). Specific facets of perception for specific learning readiness facets were evaluated.

There are many problems in connection with assessment. The first is the difficulty of covering all factors that have already been shown in the earlier part of this chapter to be related to readiness. Interpretation of results should be done cautiously because of other behavioural aspects not specifically measured by any particular test (Hildreth cited in Ramphal 1972). Two important factors in successful adjustment to the school situation, (motivation for explicit learning and social adjustment) are often not included because it is not so easy to measure these more affective aspects. Often interviews with parents are added to conventional standardised tests. These may reveal valuable information about the child's developmental history. Observations of parent-and-child inter-action may reveal the degree of dependence on the parents, and the attitude of the parents towards the child (Whittle 1982).

Secondly, it must be realised that all testing is limited in its predictive value and the totality of the child's disposition can never be expressed in a test result (Hillebrand cited in Van der Spuy 1966 p40). Fraser (1984 p23) claims that research has revealed the inability of readiness tests to predict accurately in individual cases and to measure important aspects like attentional and motivational factors. In this regard the value of subjective assessment should be considered. Webb (cited in Lehobye 1978) maintains that subjective assessment by teachers, through thorough observation, is needed to supplement test results. Moreover, research indicates that teacher assessment is just as reliable as standardised test results (Fraser 1984 p23), especially if the teacher has had more than 10 years' experience (Kollinger cited in Lehobye 1978 p19). Such fairly accurate assessment could be supplemented by objective records on motor skills, like tying shoe laces, buttoning jerseys, handling writing materials or intellectual accomplishments like recognising differences or responding to stories (Brandt 1976). Du Plessis (1981) supports the idea of teacher assessment because only a limited number of the multitude of factors determining school readiness can be measured by standardised tests. A comparison of teacher assessment and results on a standardised test convinced Nell (1983) that the preprimary teacher, who knows the child well in all situations is a reliable judge in predicting future school success. He cites Huffman

and Glazzard who suggest that preprimary teachers should be requested to make more use of structured observations. Advantages of such subjective assessment, according to Fraser (1984 p27), include the shorter time needed, evaluation of variables not normally measured by tests, a "natural" assessment (as compared to a test situation), and the personal knowledge a teacher has of the child.

A third extremely difficult aspect is the fact that accurate evaluation implies individual testing. With the vast numbers of new school beginners every year, individual testing programmes are very time consuming. Even if testing is done in smaller groups, there are still limitations. Ramphal (1972 pl3) suggests a preliminary group screening and a subsequent individual testing of those who show signs of unreadiness.

For South African circumstances there are two further problems. Firstly, environmental differences might influence the accuracy of measurement. Vast differences, for instance, exist between American and African children. Foxcroft (1985 p82) cites authors who hold the view that there is no such thing as a completely culture-free test and that cultural influences will always be reflected in test performances because experience with the stimulus differs, motivation differs, the structure of test language may be unfamiliar and the translation may be linguistically doubtful.

Freeman (1985) investigated whether differences in socio-historical conditions affect performance on tests that claim to be "culture-fair". Cultural variables included were rural/urban residence and ethnic group membership of Venda/Xhosa groups. The life style in a rural community differs dramatically from the urban community which is dominated by western modes of perception, abstraction and logic (pl12). These differences seem to result in different styles of cognition. Children of a people with no representational art in their traditional culture, for instance the Xhosa, are dependent on contact with western art to learn to interpret and recognise a picture of any well known object, because representation on a two-dimensional surface poses perceptual problems. Herskowitz (cited in Freeman 1985, p72) for instance, showed third world people photographs of their close relatives, and found that they could not recognise them.

Segal et al (cited in Grant 1969 p46) found that Africans from conformist tribes, subjected to intelligence tests with a visual-perceptual basis, were at a disadvantage. Grant argues that depth perception can, for example, be facilitated by the early exposure of children to pictures, but the rural poor cannot provide opportunities for their children to develop the perception skills needed.

A second South African problem is the lack of adaptation for appropriate standardisation for different cultural groups. Langenhoven (cited in Jooste 1976 p54), sees South African tests as culture-bound in verbal as well as non-verbal items. Ramphal's investigation (1972) has, for example, proved the unsuitability of the National Bureau Group Test for Five- and Six-Year-Olds as an instrument for measuring school readiness among South African Indian children. The fact that it was standardised for Indian children, did not exclude some important cultural influences. The "correct" answer for the item in which children were expected to indicate which animal is not slaughtered to provide meat for human consumption, is, according to the list of correct answers, the dog. Hindu testees, however, indicated the cow. This was, in fact, correct for children from a Hindu background.

Apart from such socio-historic influences, home conditions, parents' occupation, motivation, the test environment (e.g. anxiety) and even the tester himself, may interfere with test results. Administration of a test by an examiner of a different race might, for instance, result in lower scores (Ratusnik and Koenigskecht cited in Freeman 1985).

In South Africa various tests with widely different items were in use and the need for a uniform test was expressed by many authorities (Jooste 1976 p136). The need for a test standardised for South Africa was met when the Nel-Sonnekus Developmental Scale for Preschool Children was standardised in 1957 (Nel and Sonnekus 1963) by Naude. The Developmental Schedules of Arnold Gesell form the basis of this scale. Nel and Sonnekus compiled 42 tests with 160 items, from this scale and from other sources, in an attempt to evaluate all relevant aspects of school readiness. Apart from the quantitative result, (which is expressed as a Development Quotient (DQ) of 3 - 6 years, on motor development, adjustment, language development and social development) the compilers note that observation of the child is also important to obtain a qualitative evaluation.

Validity of this test was proved acceptable (Jooste 1976 p94). A significant correlation between IQ and DQ was found. It was found not to be practical for large groups of children, but suitable for clinics (Van der Spuy 1966 p283). Administration takes two-and-a-half hours (Jooste 1976 p135). The Education Department at the University of Pretoria used it for research purposes, but it has not been made available for use by kindergarten teachers (Jooste 1976 p94).

The **National Bureau Group Test for 5- and 6-year-olds** was developed by the HSRC in 1960 and standardised for the RSA. Basically it is an intelligence test with tables converting raw score to mental age and IQ. It consists of six subtests: visual analogy and discrimination, a maze, deductive reasoning, identification of the object that does not fit, numerical ability and lastly reproduction of a gestalt of dots on a grid. It takes one-and-a-half hour to administer and 10 children can be tested simultaneously. Van der Spuy (1966 p283) reports it to be too difficult for the school beginner and suggests its use three to six months after school entry. Garbers (1966 p113) finds it a good indicator of school adjustment because a variety of psychic activities related to reasoning, learning processes and language are tested.

A **School Maturity Test** was developed by van der Spuy (1966), for use by teachers, in the absence of valid South African tests for school beginners. He used existing principles of testing and included testing of verbal ability, perception, numerical ability, hand-eye co-ordination and spatial perception. A parents' questionnaire on social and personality maturity supplements the information gained by the test. The test was developed over ten years and published in 1964.

Garbers' individual tests can be carried out by the nursery school teacher (Garbers 1969). The battery is a compilation of useful subtests from a range of previously published tests. For fine motor control the child draws a triangle without turning the paper. For establishment of dominance the teacher is expected to observe the child's preferred hand, foot and eye in a number of different activities. For social and emotional maturity the Border Pattern is a very good indicator of concentration, perseverance, carrying out instructions and sticking to a task. A rectangle of 90 x 140 mm must be bordered by the repetition of a circle, cross and triangle. Parents and nursery school

teachers supply information for questionnaires on the child's emotional control and group and individual participation. The Huth profile adapted by Cordt and Walter is used (Garbers 1969). The intellectual level of school readiness is assessed by using free drawings of a house, tree and human figure and analysing them for the structuring of the perception field. Copying schematic figures are even more revealing. Correct copying of a number image indicates an acceptable perceptual level. Subtests 3 and 4 from the National Bureau Group Test for 5- and 6-year-olds are used for logical reasoning. Associative thinking is tested by repetition of a 16 syllable sentence and memory by retelling at least five of eight main units of a short story. Identifying flashed number images indicates the level of number comprehension.

An Observation Scale, which can be used with ease and without intensive training, was produced by the Department of Education and Training (OO/ET 176) (n.d.). Teachers of preprimary classes, registered with the Department, are expected to indicate the progress made by individual children in various areas by simply answering yes or no to 52 questions, e.g. Can the child arrange objects according to colour/size/number etc. Aspects such as motor co-ordination, independence, memory, language ability, social adjustment and emotional stability are evaluated. Evaluation is done in March, June and November.

The Aptitude Test for School Beginners (ASB) was released in 1974 by the HSRC. It is the only group test that is standardised in South Africa with norms for different ethnic groups. Teachers can be trained to use the test which is applied in the first six to eight weeks of the school year. It consists of eight cognitive tests that gives a differentiated impression of the aptitude of testees. The total mark gives an indication of the general intellectual development of the testee. This test is not described here in detail because it is the instrument that was used in this study and the contents and application of the test is described fully in Chapter 11.

A School Readiness Investigation by Grove (1984 pl40-179) is an individual test that takes 30-40 minutes to administer, and should be done three to four weeks before the school year starts. A parent questionnaire precedes the testing. Three broad development areas are tested: physical, personality and social competency, and lastly the intellectual school readiness level. The scores suggest whether pupils

are school ready, in a doubtful stage, or unready. No details are given about standardisation.

The creation of the **School Readiness Evaluation by Trained Teachers (SETT)** (HSRC IPER 1985), was a response to the need expressed during 1980 by the South African Education Departments for a standardised school readiness test which would recognise the multi-racial situation in the country (Joubert 1984). It has already been standardised on white, Asian and coloured school beginners. It is presently being standardised on blacks. This is an individual screening test for school readiness which was claimed to have far greater predictability value for success in school than age. Teachers are currently being trained to use the SETT to discover weak areas in the development of prospective school beginners. They work under the supervision of school psychologists in service of Education Departments (HSRC IPER 1985 pl). A Parent Questionnaire as well as a Nursery School Questionnaire for the Evaluation of School Readiness (Joubert 1984) are also completed.

Three scales, with 12 items per scale, are used in this test: Language and General Development (LGD), Physical and Motor Development (PMD) and Emotional and Social Development (ESD). The tester is specifically required to note what is called "help"-items on the intellectual scale. These items give an indication of the extent to which the child benefits from help given in a structured situation.

The LGD is based on ready knowledge, memory, verbal imitation, analysis and synthesis. The PMD tests perception, co-ordination, fine motor movement and gross motor movement; the ESD tests self-confidence, exploration, self-control and motivation (Joubert 1986).

A Screening Test Battery for Bridge Class Pupils compiled for the Soshanguve College for Continuing Training by Smith (n.d.) has been developed to diagnose developmental disabilities so that specific weaknesses can be attended to in time. The test battery consists of six tests: Gross motor level, fine and visual motor movements (items from the Frostig Visual Motor Test), ocular pursuit, sensory motor development, visual perceptual ability (the Winter-haven Forms or Beery Test) and auditory impairment. An evaluation profile, a behaviour profile, a medical history and a behaviour rating scale by parents complete the evaluation.

A **Learning Readiness Test for Black School Beginners** is presently being developed by the Child Guidance Institute of the University of Pretoria (Ras 1987). It is a group test and a trained teacher may apply it. The manual states that the purpose is to obtain a differentiated picture of the learning readiness of black school beginners; to place them in homogeneous groups; to aid remedial assistance and to predict future scholastic achievement (p1).

Eight pre-test items are not scored, but evaluated qualitatively. The eight tests that are scored are: eye-hand co-ordination (the skill to draw what he sees and to use pencil and paper is demonstrated); spatial orientation (the ability to observe and describe spatial relationships, which is important for learning to read and write, is tested); verbal comprehension (comprehension of the spoken word is tested); visual perception (the ability to distinguish between similarities and differences, i.e. analytical observation is tested); numerical (grasping quantities, proportions and numbers, as well as verbal comprehension, logical thinking and concentration are tested); conceptualisation (concepts like big/small, much/little must be distinguished); memory (the non-intentional visual and auditory memory is tested); and body knowledge (knowledge of his own body is tested).

Two equivalent forms of the test are produced and these can be used in pre-test/post-test designs. The content is based on a central theme: a visit to a farm in the one version and a picnic in the alternative version. A group of five pupils can be tested in 30 minutes. It is available in English, North-Sotho, Tswana, South-Sotho, Zulu and Xhosa. The test material consists of a manual, a workbook for pupils, a scoring key and record cards on which personal information as well as observations on the child's behaviour during the test are recorded. All pictures in the workbook are of black people.

From the survey it can be seen that there is a strong and growing South African interest in assessing the child's ability to profit from formal schooling. The needs of black school children have been met in only a few of these tests. The high drop-out rates in black education, particularly in the Junior Primary level, are partly linked to the lack of school readiness. Whereas parents in first world countries are highly aware that their children might not be ready for the demands of formal

schooling, parents of third world school beginners are mostly unaware of the fact and children are sent to school as soon as the school accepts them.

The tests are in many cases administered individually and require considerable skill on the part of the tester. At the time of writing, the author had difficulty in finding an appropriate test for the practical part of this thesis.

Having given a readiness test or a combination of tests, the teacher is expected to devise and use appropriate programmes to assist the children, depending on the levels shown in the test. Children who show a clear lack of readiness prove to be the biggest problem. As could be expected, results of readiness tests often show poor performance by children in deprived circumstances. Compensatory education interest from the 1960's was influenced by these results and attempts were made to provide preschool experience to upgrade the performance of the child in those areas of tests where deprived children were shown to be most seriously affected. Valuable opportunities were created for group play and group work, development of task consciousness, respect for others and creative activities (Kok cited in Faure 1971). Many of the programmes were initially devised as preschool programmes to aid the disadvantaged child and to foster motivation for learning and orientate the child towards school. Mention was made in Chapter 4 of models that emerged in response to needs of deprived children, e.g. the Academic Preschool (the Bereiter-Engelmann programme), the Tuscon Early Education Model and the Skill Development Curriculum. Apart from building a positive self-concept, these programmes develop effective language usage, concept formation and perceptual and auditory discrimination (Feldmann in Hechinger 1966 pp97-103). Through the American programme, Project Head Start, mentioned in Chapter 2, children from lower classes were helped to overcome the deficiencies in their upbringing due to social deprivation. Another programme that develops a scholastic task attitude, the "Preschool Motivational Curriculum" (published by Atkins and Balliff in 1971), is aimed at enhancing a positive self-image, eagerness for learning, enjoyment of formal schooling and purposefulness (Vaughan 1977).

Krugman (1956) argues that the school and the community should provide conditions for children from poor homes to develop positive self-concepts so that they can realise their potentials. It is debatable, however, if restricted remediation in preschool years or the first year of formal school can be effective if the whole environment the child goes back to after school is "deprived". Getzels (1966) can see no benefit of compensatory education as long as the environment of poverty remains unaltered. Verzaro-Lawrence (1980) comes to the conclusion that only a comprehensive programme of services can counteract the effects of poverty in America. In Ciskei, poverty in rural areas is a great stumbling block. Parents scarcely have the means to provide the basic needs, let alone to provide opportunities for better educational attainment.

Teachers of disadvantaged preschoolers should get intensive training. Moshe and Sarah Smilansky's programme in Israel makes a special feature of teacher training methods (Wein 1971). The teaching style should encourage task directedness by keeping a balance between directed and free activities, between direct teaching and question-posing, by control of the tasks given and by approval of individual attempts. Because of the short time available, disadvantaged children must learn at a faster than normal rate and therefore need a selective preschool programme to foster school readiness. The focus shifts from a custodial purpose and socialization to the enhancement of cognition (Harry Beilin cited in Stanley 1972 p165).

Readiness programmes can be introduced at different stages and some broad approaches will briefly be discussed. In circumstances where many pupils need specific preparation for formal learning, and where finance for conventional schools is limited, consideration is often given to the possibilities of home programmes administered by untrained or partially trained people, often the mother in the home. A stable and affectionate mother-child relationship fosters feelings of safety and allows the child to start experimenting. By guiding his play activities, the mother can teach her child to concentrate, to use different kinds of apparatus, to co-ordinate movements, or to start logical reasoning. The fact that home-based intervention is cheaper than centre-based care, further adds to its desirability.

Research by Goodson and Hess is cited by Verzaro-Lawrence (1980) to prove that parent training programmes provide children with immediate and long-term advantages, both in IQ scores and in social adjustment. In the USA Project Home-Start, where mothers were specifically trained to provide stimulation for their children at home, children scored higher on school readiness tests than children of non-participating mothers (Hertz cited in Verzaro-Lawrence 1980).

Numerous examples are cited in the report of the Bernard van Leer Foundation (1986) of improved mother-child relationships, mothers' growing self-esteem, higher quality parenting and awareness of the importance of early childhood education. In countries around the world mothers have undergone para-professional training and work as teachers in preschool centres set up by the community or in home visiting programmes, e.g. the Morasha project in Israel (p38); the Promesa project on the coast of Colombia (p54); the Pronoei in Peru (p62); the project for refugee Cambodian children in Thailand (p22); and the Malasian Child Care Services which also trains mothers to make learning material for their children (p64). Attitudes of parents are changed and instead of passive spectators, they become active participants in the education of their children (p6). Massai mothers in Kenya are actively involved in tasks like carrying water and fire wood to the preschool.

Davis (1980) shows that success has been achieved in a South African home programme linked to coloured families in the Western Cape. Preparation for reading is integrated with ordinary daily activities like reading aloud to the children, story telling, examining picture books, experimenting with blocks and various art activities.

In many third world homes the telling of traditional stories ("iintsomi" for the Xhosas) is not supplemented by the explanation of pictures and the reading of stories. The traditional African family is authoritarian and self-expression is not cultivated in the child. A modest, obedient and respectful child is reared (Bakara 1970). The traditional mother will have to be alerted to ways in which learning readiness can be promoted.

In Bophuthatswana it was found that home visits by trained para-professional women ensure better interaction between mother and child

for the first two years of life. At the age of three the child becomes a member of a play group. These groups meet twice a week and partly-trained mothers offer special activities. Discussion groups for mothers are organised at a centre fortnightly (Bodenstein 1983). This kind of approach in which **minimally trained** mothers or leaders from the community fulfil the role of the teacher, is gaining in importance where vast numbers of children and a shortage of professionally trained staff exist. The Educare Centres under observation in this investigation fall in this category. They move a step closer to nursery schools in that activities are offered for five days a week and numbers are much higher than in a play group.

Conventional nursery school programmes, as mentioned in Chapter 4, offer various activities that are in fact formal or informal readiness programmes. In South Africa the training of white teachers for such schools, has emphasised the organisation of informal and social programmes heavily based upon play. Comparatively little emphasis has been given to structured programmes with a strong school readiness purpose. Bakara (1970 p55) holds that programmes for African children are best derived from the constituents of learning readiness i.e. cognitive aspects like processing information, perception, concept formation, selective attention, discrimination, classification, curiosity; psycho-motor aspects related to maturation; and personality aspects like the need for achievement and perseverance. Bakara suggests a highly directed instructional approach like the Bereiter and Engelmann programme for African children for fostering good language usage, skills basic to reading, numerical ability and writing skills; socially oriented programmes of free play alone, are not suitable for African countries (Bakara 1970).

Because educationists in some European countries found that the nursery programme used did not show very large gains for the children, of whom many still struggled in the first year of schooling, the preschool and primary school were combined. Holland and Belgium are already implementing such a single basic education (Van der Eyken 1982).

In the Republic of South Africa many nursery schools have been taken over by the Department of Education and function as preprimary schools with specific curriculum planning. As in the conventional nursery schools in this country, informal play activities predominate. These

preprimary classes either function as separate administrative units at primary schools as in Transvaal departmental nursery schools for whites, or the classes are integrated administratively with existing primary schools as in some schools in the Cape Province (Le Roux 1980 p29).

Programme developers claim readiness programmes can also be used in the first school year before formal instruction in reading and writing starts. These programmes have proved to be valuable especially for those pupils who have not had the privilege of attending any preparatory preschool programme. The Mastery-Before-You-Proceed principle provides a solid basis for school beginners and specific aims must be reached before formal reading or formal mathematics is started. The Distar reading readiness programme developed by Engelmann and Bruner, for instance, guides the child according to his own individual tempo (Van Rensburg 1979). Four South African programmes can be described.

The readiness programme of the Transvaal Department of Education was instituted in 1971 to help school beginners during the first 10 - 12 weeks in grade 1 to prepare them for formal schooling (Grove 1978). It sets out to improve visual perception (visual-motor co-ordination, foreground/background discrimination, form constancy, position in space and spacial relationships), auditive perception, affective perception and olfactory and taste perception.

Varying degrees of success of this readiness programme were found. When Super (1979) created his Perceptual Development Assessment Device (which has already been described), he used it to evaluate the pupils in Transvaal grade 1 classes. He found that pupils, on school entry, varied markedly in perceptual abilities. Skills in counting, writing, copying and hand control, i.e. visual-motor perception, showed most development after exposure to the programme while maturational tasks showed least improvement (p169). He claims that the preschool background of the child affects perceptual development during the readiness programme greatly and success depends on the time allowed for individual pupils to progress at their own speed. Pupils should, therefore, be streamed according to individual levels of readiness at school entry (p174).

The effect of the Transvaal programme on cognitive development was evaluated by means of a Classification Test, developed for this purpose, by Gouws (1977). In the pre-test she found that many pupils in Grade 1

were still in the pre-operational Piagetian stage and did not have a good number concept. Although other research has shown that classification can be learnt (Van Zyl cited by Jooste 1976) the Transvaal Education Department programme had shortcomings in this regard. Readiness programmes should not concentrate on perceptual abilities and disregard cognitive functioning. The five "knowledge" areas indicated by Piaget should feature: physical, logical-mathematical, number concepts including "more/less" and conservation, structuring in space and time, as well as social and representational functioning (Gouws 1977). After exposure to the readiness programme there was no significant improvement in classification ability, class inclusion, or multiple classification. She found that egocentricity restricted the pupils' cognitive functioning.

The second programme is specifically concerned with black pupils. De Jongh and Nel's programme (1979) was a response to high failure rates and drop-out figures in black schools. According to de Jongh (1986) 31,5% of 1975 school beginners and 54,4% of 1978 school beginners did not reach Std 1. The programme has seven sections: Mathematics, part 1 and 2; Reading and Language; Writing; Manual Skills; Body Movement; and Music and Song. It covers instruction for ten weeks (De Jongh and Nel 1979 p5). Research results obtained from the implementation of the programme in schools in South West Africa/Namibia indicated that more pupils from experimental groups in Sub A and in Sub B achieved scores above 50% in Mathematics, Reading, Language and Writing than did pupils from control groups. As from 1987 the programme has been prescribed for all schools of the Department of National Education (SWA/Namibia) (De Jongh 1986).

The third programme is also concerned with black pupils. The Department of Education and Training has introduced an Upgrading Programme for Primary Education (UPPE) that includes a detailed school readiness programme for all black school beginners to be undertaken during the first quarter in Sub A (Whittle 1982). The suggested preparatory reading programme covers nine to twelve specific steps for every day for a period of ten weeks (Du Toit 1982). Implementation of the programme at black schools revealed that 15 weeks rather than twelve, are needed to complete the programme satisfactory (Department of Education and Training 1986) and teachers are expected to move through them as pupils'

attainments develop. This stipulation could raise organisational difficulties in large classes where a wide range of developmental stages soon become apparent.

A fourth programme deserves brief mention. Van Rensburg (1979) examined the learning readiness of Indian school beginners in 1975 in Chatsworth. The experimental group followed a **perceptual-motor readiness programme** for the first ten weeks. Although they started with formal instruction much later than the control group and learnt fewer words on flash cards, they were not behind in their reading ability at the end of the year. The experimental group was in fact more goal-directed, felt better in school and had a better task orientation.

There is one clear disadvantage with all the programmes developed for South African conditions: they assume that all pupils need to move through them. Those pupils who are ready for formal learning could become bored and frustrated. On the other hand, some programmes proved inadequate for those children experiencing serious problems. This problem was partly dealt with in De Lange's (1981) suggestion of a **Bridging Year**, mentioned in Chapter 5. These ideas were spelled out in more detail by Reilly and Hofmeyr (1983), but had already been anticipated by Grey (1957 p171), Garbers (1966 p117) and Olivier (1976). The aim of the bridging period is to achieve school readiness by as many children as possible **before** formal basic education begins (De Lange 1981 p19). This idea has been propagated in other countries, e.g. a "Begindergarten" programme in Michigan (Jopke cited in Rochford 1985). During this period of time the child is expected to move from a playing attitude to a working attitude so that he will have established a task orientation on school entry (Fabian 1985). The ideal, to admit an individual child when he is ready, may be realised by the implementation of a bridging year (Grové 1984). Three preprimary classes at primary schools at Soshanguve near Pretoria and one in Walvis Bay already serve as experimental schools for the bridging period. At the Soshanguve College for Continuing Training, a Screening Test Battery for Bridge Class Pupils has been developed to identify developmental lags, which can then be attended to (Smith n.d.). It is foreseen that the first weeks in grade 1 will no longer be needed for readiness programmes and the failure rate will be reduced (Reilly and Hofmeyr 1983 p126).

It has become clear in this chapter that defining school readiness, and especially the multi-factor nature of readiness, makes testing for readiness and devising programmes difficult. It appears as if assessment is lagging far behind the understanding of the readiness concept. For a large segment of comparatively untrained teachers with limited theoretical background, it is difficult to bear in mind the multiplicity of factors, and interpretation of test results might be done without the necessary caution. Implementation of programmes also reveal many problems. A lack of flexibility of programmes to provide for a wide range of readiness, leads to ready and unready pupils being subjected to the same programme. The physical restrictions many teachers face, often make it impossible to implement programmes successfully. In this regard large classes of 40 - 50 pupils and severe lack of physical materials might lead to the collapse of the programme.

In this chapter we have identified some components of readiness and examined measuring instruments and programmes to foster readiness. The practical investigation as described in the following chapters, endeavours to apply these principles to the concrete situation in the Keiskammahoe District in Ciskei.

CHAPTER SEVEN

BACKGROUND INFORMATION ON THE CISKEI
AND KEISKAMMAHOEK DISTRICT

As stated in Chapter 1, the area of investigation of this thesis regarding private preschool care, is the Keiskammahoek Magisterial District in Ciskei. In this chapter background information regarding the Ciskei and Keiskammahoek district in particular is given on some aspects that have an indirect bearing on the issues under discussion in this thesis: the geographical position, origin and development of the Republic of Ciskei, and some demographic and socio-economic aspects. Certain aspects of the educational situation in this country are, however, given more attention.

Geographically Ciskei consists of a single unit situated between the latitudes 31°55' and 33°30' South and the longitudes 26°20' and 27°50' East. It covers an area of 7 760 square km (Development Bank of SA 1985). It fronts onto the Indian Ocean on the south-east coast of South Africa. Its south-western border is marked by the Great Fish river and further inland by the Kat river, while its northern and north-eastern borders are the Swart Kei and Klipplaat rivers respectively. The eastern border is a winding man-made line (Van der Kooy 1981). The locality of this area is indicated in Figure 2.

Historically the presence of the Xhosa speaking Southern Nguni people in this area dates back to the great migrations, certainly not later than the 15th century, which originated in Central Africa. Chief Xhosa (1535) is traditionally associated with the arrival of the Nguni in the Transkei-Ciskei region, but tribal people speaking a Nguni language and following recognisable Nguni traditions, had clearly been well established in the region by the time the first Portuguese shipwrecks occurred on the South East coast of the country. Xhosa history is characterised by constant splitting of tribes and the formation of new tribes (Schoeman 1987).

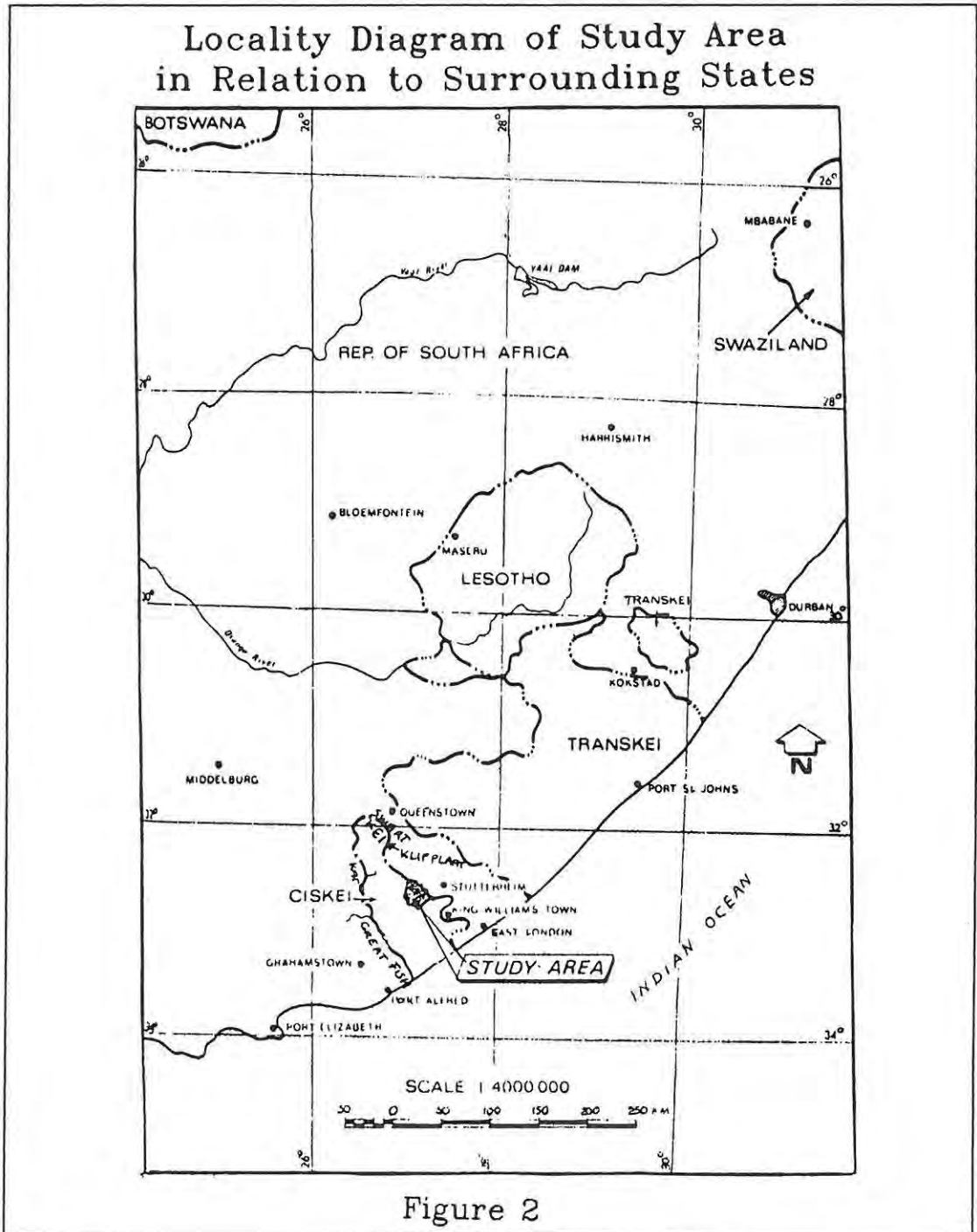


Figure 2

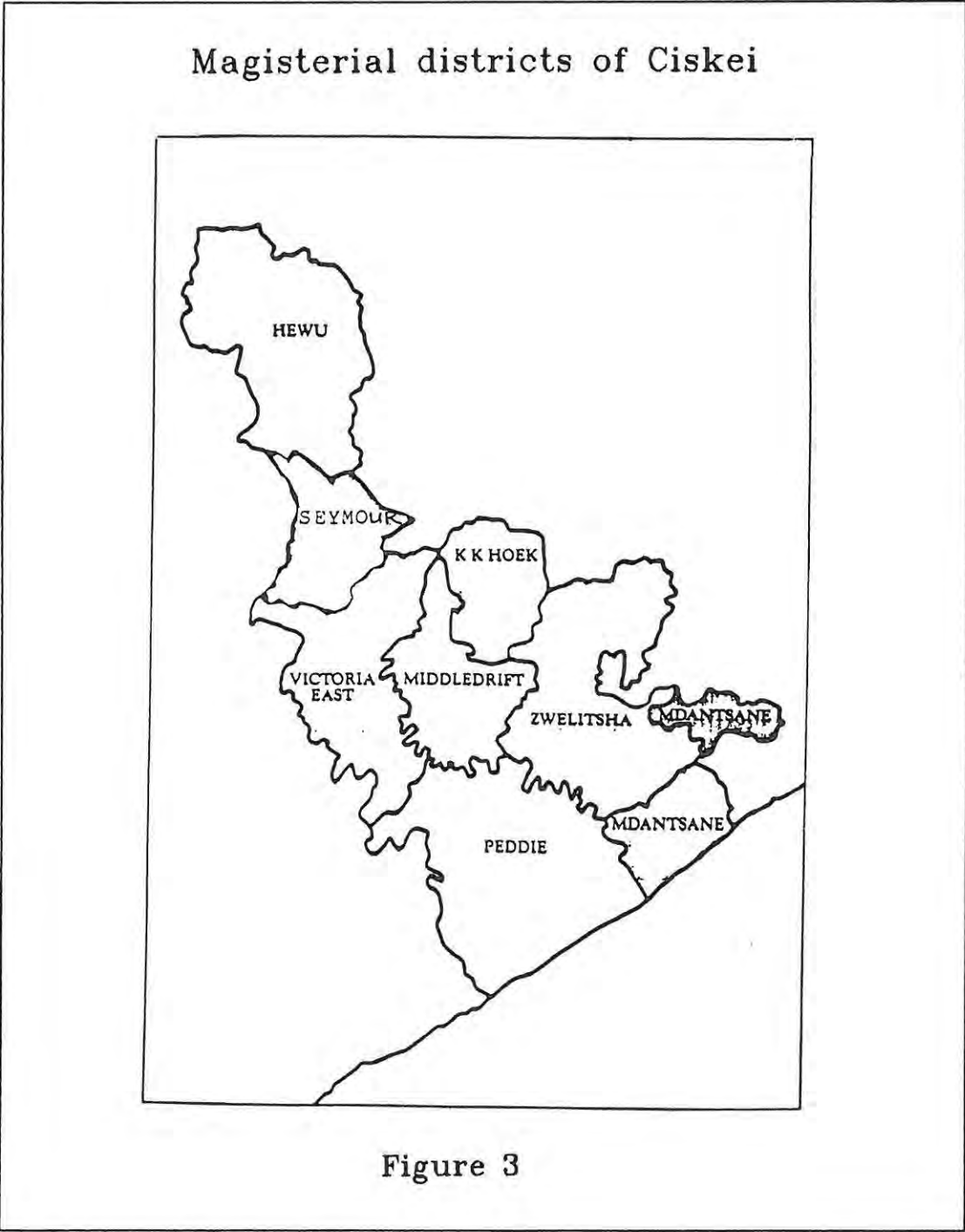
Rarabe (1722-1787), for instance, broke away from the Gcaleka and crossed the Kei river to settle in what is now Ciskei. The Xhosa were thus split into two autonomous parts (De Jager 1971). The government of the Xhosa in the Ciskei was entrusted to the Chief and his tribal council (Holdt 1971). Contact with the white stock farmers in the eastern province of the Cape of Good Hope resulted in conflict as a result of theft and reprisal raids by both parties. Coetzee (1971 p68) describes the contact between the two "cattle cultures" as violent and relentless, especially along the Fish river frontier. Attempts at establishing boundaries between the Xhosa and at first the Afrikaner pioneers and later the British settlers, led to disputes and the area was subject to nine frontier wars between 1779 and 1878. At various stages British rule was established in the territory: in 1835 the Province of Queen Adelaide was proclaimed between the Kei and Keiskamma. In a little over a year, however, the area was restored to the Xhosa by the colonial secretary. In 1837 it was proclaimed as British Kaffraria with a chief commissioner in control; in 1866 it was annexed by Britain and incorporated in the Cape Colony. After the formation of the Union of South Africa in 1910 certain territories were legally apportioned to the various black people by means of the Native Land Act of 1913. The Native Land and Trust Act of 1936 allowed for the expansion and consolidation of these areas. Specific quotas were allocated to each province and a trust fund established to purchase land for occupation by blacks (Holdt 1971), but the purchasing of quota land proceeded very slowly.

The Natives Representation Act of 1936 removed black voters from the common roll, but provided for white representatives who would be voted for on a separate roll. In 1951 the Black Authorities Act recognised tribal authorities and provided for the development of regional and territorial authorities with limited executive powers. The Black Self-Government Act of 1959 provided for self-government and sovereign independence of the various black peoples within the borders of South Africa. Following the establishment of tribal and regional authorities, Ciskei constituted its own territorial authority in 1961 and on 20 September 1968 wider executive powers were granted to it (Benbo 1975). It received legislative and executive powers in 1971 through the Legislative Assembly and became a self-governing territory within South Africa on 1 August 1972.

One of the problems of the country was the scattered nature of the tribal lands. On 19 April 1971 plans for the partial consolidation of the Ciskei were tabled in the Assembly (SA Institute for Race Relations 1972). In 1950, for instance, Ciskei had consisted of 20 scattered areas. These were consolidated into five large units by 1975, and it was expected that Ciskei would become a single consolidated area, with certain white-owned land being eventually added to join the existing larger Ciskeian areas. Following the Van der Walt report in 1979, regional committees could make submissions to the central Consolidation Committee to obtain more land than that stipulated in the 1936 Land Act and the 1975 provisions. Before the 1975 proposals could be implemented, the Ciskei had become independent in 1981 with unclarified boundaries (SAIRR 1986) but legal provision is made for the state president of the RSA to add land to independent black states (Odendaal 1987 p18-19).

Initially the seat of government was Zwelitsha, but a new capital has recently been developed at Bisho. The country was previously divided into seven magisterial districts with 42 tribal authorities and seven regional authorities in the rural areas, responsible for administration under control of the Ciskeian Department of Internal Affairs (Macgregor 1987 p5). Figure 3 shows the original seven districts and the latest addition of Seymour, which consolidated the area.

Published figures on the **population** of Ciskei differ widely. There are many problems in connection with accurate census collection in areas like the national states and the 1980 census figures for Ciskei conflicted seriously with verifiable population parameters (Development Bank of SA 1985 p1). The addition of more land in line with consolidation plans and the loss of land (e.g. when Glen Grey and Herschel were incorporated into Transkei) also influenced figures from year to year. According to Macgregor (1987) the 1984 population was 974 000. Estimated population figures for 1985 provided by the Development Bank of South Africa for the total population were 750 000 (265 500 urban and 484 500 rural). The 1985 census statistics were adapted, with the help of the HSRC, to allow for probable population underestimates: the total arrived at was 914 000 (Carstens et al 1987). In addition, the Directorate of Planning of the Ciskeian Government sought the assistance of the Bureau of Market Research and of the Development Bank of Southern Africa to develop a sample survey method



to verify population figures needed for the development plans for each of the five identified development regions within Ciskei. A careful study was undertaken in October 1984 by studying all 450 villages and selecting 5% of them as typical of certain rural groups and then by selecting 10% of houses in urban areas as typical of urban conditions. These were expected to provide detailed sample survey information. Aerial photographs were used to count residential structures. According to this study the 1984 population of Ciskei numbered 912 161. This figure is very close to that of the HSRC estimate, and so it can be assumed that the country consists of approximately 1 million people. Of this total population 330 000 (36,2%) lived in larger urban areas (such as Mdantsane and Zwelitsha) while 51 944 (5,7%) lived in smaller urban areas (such as Peddie) and 530 217 (58,1%) in rural areas (Development Bank of SA 1985).

Smit and Kok (cited in Odendaal 1987) identified two trends during the 1970-1980 decade: a rapid population increase and internal population movements. Natural growth was supplemented by immigration and resettlement from white areas as a result of the South African Government's Homelands policy. Changes in population figures for the different magisterial districts during this period are given in Table 7:1.

Table 7:1 Growth in Ciskeian Population

Magisterial District	1970	1980	Av Growth Rate
Hewu	30 245	74 065	9,37
Keiskammahoek	26 800	38 280	3,63
Mdantsane	85 594	178 743	7,64
Middledrift	36 734	47 926	2,70
Peddie	43 300	58 725	3,09
Victoria East	42 000	65 616	4,56
Zwelitsha	92 585	166 998	6,08

The total population over the decade increased by 76%, which varies from a 54% increase in rural and 230% increase in urban populations (Bekker et al 1982). Between 1980 and 1984 there was again a tremendous increase in population: 71,6% of the total population growth recorded for the previous decade. Continued resettlement from the Republic of South Africa, the return of migrant workers from white rural areas and a natural increase rate of 3,07% p.a. were mainly responsible (Macgregor 1987 pl). The estimated figure for resettled people by 1983 was 430 570 of whom 88 199 were in rural areas (Giliomee and Schlemmer 1985).

The population is roughly divided into three types of communities: urban, rural and what has been described as 'closer settlements'. Closer settlements usually originate mostly where people resettle as either forced or voluntary migrant workers (Bekker 1984) and erect modest dwellings. They have no access to arable land or grazing fields and living standards tend to be low, as reflected by the fact that the incidence of kwashiorkor and morasmus is markedly higher in resettlement areas as opposed to urban and traditional rural areas. A survey in the closer settlement of Tsweletswele, near East London, revealed that one out of ten young children was suffering from kwashiorkor (Fincham and Thomas 1984). In 1980, 36% of the population was urban, 54% rural and 10% lived in closer settlements. The last figure must have increased considerably in the last seven or eight years.

With a population density of 127 per square kilometre (as contrasted to 24 for South Africa as a whole), Ciskei is the most densely populated country in Southern Africa (Macgregor 1987 p1). In Ciskei rural areas the average was 67 people per square kilometer and in a resettlement camp at Tsweletswele more than one thousand. Five years before it had been 56 for the total population and 50 in rural areas (Fincham and Thomas 1984). This change represents a rise of 125% (Daniel cited in Fincham 1982 p2). In other words, a large number of people live in a small area without natural resources and with poor industrial potential (Fincham 1982 p2).

Ciskei has a demographically young population (59% are under 25; 44,8% are under 14) and within 27 years the population could double by natural increase alone (Daniel cited in Giliomee and Schlemmer 1985). Based on sample population surveys conducted throughout Ciskei in 1984 (Ciskei Directorate of Planning 1985), the age characteristics of the total population are presented in Table 7:2.

Table 7:2 Age Categories for Ciskeian Population

Age	% rural	% urban
0 - 5	13,68	13,09
6 - 20	38,52	34,23
21 - 65	42,37	50,16
+65	5,43	2,52
Total	100,00	100,00

The economic problems of the Ciskei are partly revealed in these figures. In particular it should be noted that age expectancy in the rural areas would seem to be lower than in the urban areas, for the over 21-year-old age group. The greater number of those over 65 in the rural areas can be explained by the movement away from towns to original homes of retired workers and widows. Another explanation is the migration to the towns to work of those in the economically active age ranges.

The estimated number of preschool children below four years of age for 1985, was 122 250 of whom 37 898 were urban and 84 352 rural (Development Bank of SA 1985). Figures supplied by Nicol 1980) indicated an estimation of 175 000 preschool children for 1985 without setting an age limit.

In 1980 almost 80% of the population was not economically active. The 20% economically active figure includes the unemployed who were seeking work (Development Bank of SA 1985).

Socio-economic aspects that will receive some attention in the present study are adult educational levels, the labour situation, health aspects and formal school education.

The educational level obtained by a person has a considerable influence on the kind of employment he is engaged in and consequently on his financial status which in turn influences his ability to care sufficiently for his dependents. Research done by Terblanche in 1983 on a sample of 1 496 families in two urban and two rural communities in Ciskei showed the sample's educational qualifications to be as reflected in Table 7:3 and in Figure 4.

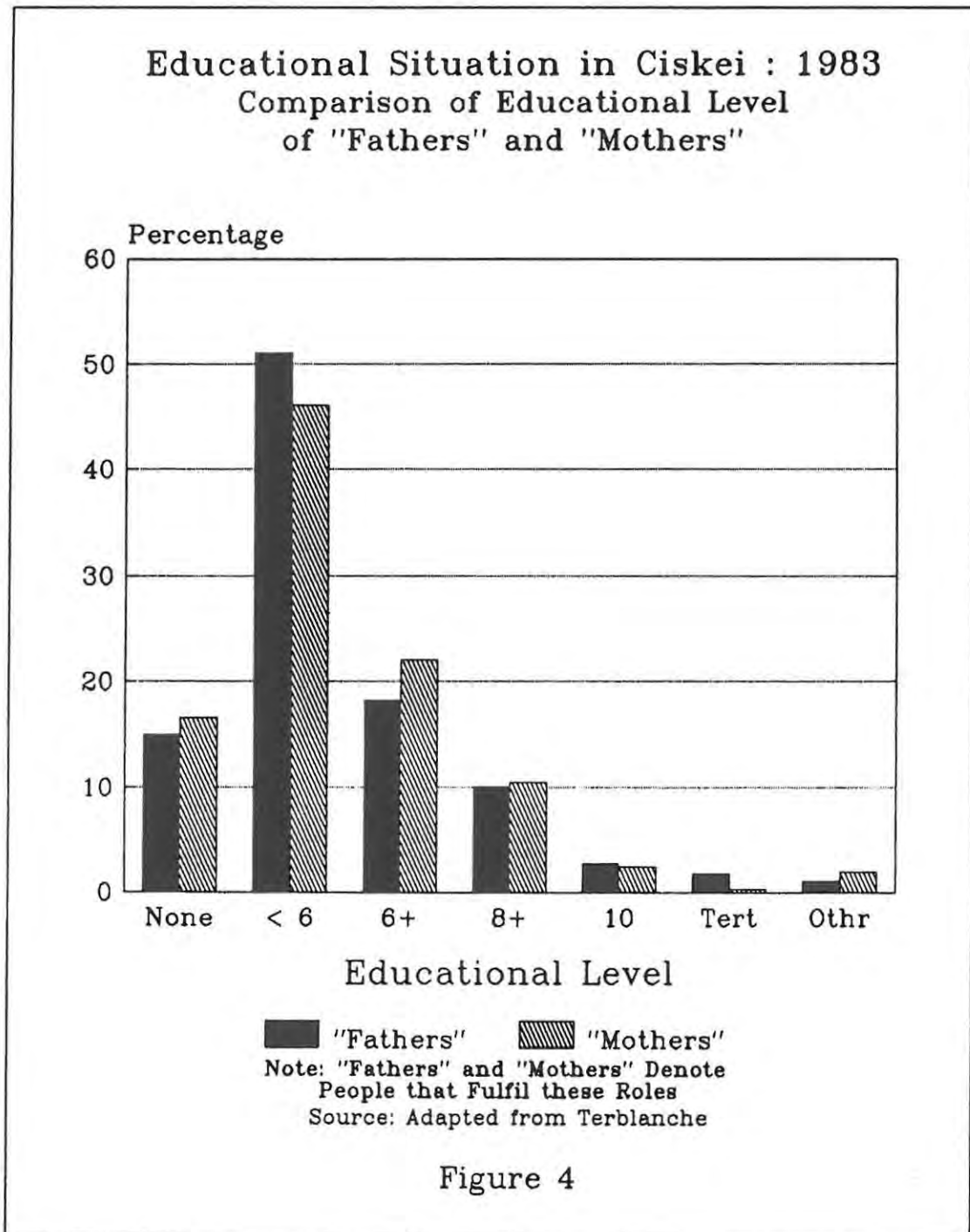
Table 7:3 Educational Qualifications in a Sample of Homes

The men who fulfil the father's role in the family:		The women who fulfil the mother's role:
No formal education	: 15,0%	16,6%
Lower than Std 6	: 51,0%	46,1%
Standard 6	: 18,0%	22,0%
Std 6 and a teacher's diploma	: 0,2%	
Standard 8	: 7,6%	10,5%
Std 8 and a teacher's diploma	: 2,5%	
Standard 10	: 2,8%	2,5%
Std 10 and a teacher's diploma	: 1,4%	
University degree/diploma	: 0,2%	0,3%
Tertiary training at technical or agricultural college	: 0,2%	
Other qualifications	: 1,1%	2,0%

It is likely, therefore, that the vast majority of the population in the Ciskei has at least some education, although Terblanche's figures compress into a single category ("lower than standard six") a very wide range of educational experience. It is generally accepted, for instance, that four years of schooling is necessary to ensure the retention of literacy. It is possible that quite large numbers of men and women in this sample would not have had sufficient education to guarantee that they can be labelled as literate. In 1987, however, the adult literacy rate in Ciskei was estimated to be well over 71% (Macgregor 1987 p6). It is also noticeable that only one-sixth of the men and women (between 15% and 16%) have had any experience of post-primary education.

Homes of poorly trained parents may lack means for intellectual stimulation and do not create an educationally supportive milieu (Terblanche 1983). Reading may not be considered important and the preschool child is deprived of books. Low educational standards lead to low income levels accompanied by poverty.

There is also a high level of unemployment. Figures from the Quail report (1980) indicated that, in the age group 15 - 65, close on 40% of the urban economically active population were unemployed. In rural non-resettlement areas about a third is unemployed (Charton 1982). Industrialisation, erection of factories and creation of employment opportunities do not seem to be progressing rapidly enough. In the decade of the 'seventies, 3 000 opportunities were created at a cost of R10 700 per job. The need, however, was estimated to be as high as eight



thousand jobs a year (Daniel 1982). Estimated unemployment figures for 1984 were 170 000 (Daily Dispatch 3 December 1985) whereas the total number employed was approximately 191 000. It would seem, therefore, that the unemployment rate is increasing. Of those who were in jobs, 81 000 were employed in Ciskei, 50 000 were daily commuters into white urban areas and 60 000 were migrant workers who spent long periods away from Ciskei. The Creative Employment Action Programme (CEAP), introduced by the South African Government, provided 4 000 jobs in 1985 in the Ciskei Department of Agriculture alone (Daily Dispatch 3 Dec 1985). During the last decade the number of people employed in factories in Ciskei increased from 1 100 in four factories to 25 000 in 135 factories (Malan 1987 p9).

The lack of job opportunities in close vicinity of most villages forces many people to commute or become migrant labourers. About 40% of adult males in the 16-60 age group are always absent from their homes and a further 5-10% are away for different lengths of time. In the Peddie region 69% of the potentially economically active population are employed outside Ciskei as contract workers (Odendaal 1987 p40). Family life can, as a consequence, be destabilised and cultivation of the land hampered because it is mainly the women, elderly people and children who remain behind. Although families in rural villages, developed under the betterment schemes in 1950 - 1960, have rights to keep stock and till land, the physical environment and agricultural production have progressively deteriorated (Bekker et al 1982). Those in closer settlements are financially dependent on salaries of migrant workers and commuters and on old age pensions. In the Amatola Basin, an isolated rural area, adjacent to Keiskammahoek, many people are forced to do migratory labour: three out of four men and one out of every two women of working age are migrant workers (Bekker and De Wet 1982). The very high figures for women in Bekker's survey should be noted. This leaves only the school population and elderly people behind. Heads of households are on average over 60 years old and many are women. Many preschool children will thus be cared for by elderly people.

Income levels are generally not high. According to Unisa's Market Research Bureau, the average annual per capita income level in Ciskeian rural areas was R333 in 1981; in the isolated Amatola Basin, it was much lower at R192 with unemployment rates of 60%. The monthly household income was an average of R82, but in the resettlement area Tsweletswele

it was R34 (Bekker et al 1981). The low average income, affected by poor training, supplies basic needs only and nothing remains for enrichment of the child's experiences. With better training and more advanced jobs available in administrative posts, teaching and private enterprise, the picture has recently been somewhat improved.

Health and nutrition are closely connected to living standards. Ciskei offers its citizens a basic health service. It has five hospitals, one of which, the S.S. Gida hospital, was opened in Keiskammahoek in 1985 to replace the old St Matthew's hospital. A network of clinics is established through the country; the condition of the roads (called "torturous" by Fincham), however, hampers the functioning of health services in rural areas. Villages can easily be cut off from mobile clinic services (Gysman cited in Fincham 1982 p7). Serious problems connected to health and nutrition still exist.

An extensive research project was undertaken in 1979 by the National Research Institute for Nutritional Diseases of the S.A. Research Council at the request of the Ciskei Government. The purpose was to formulate an interventional nutritional programme (De Villiers 1980 pii). Ten urban and ten rural points were used and the children included were in two age groups: six months to four years and seven to eight years. Wide-spread energy deficiency, which increased with age, was found. All groups showed effects of Protein Energy Malnutrition (PEM). High mortality rates in preschool children in developing countries are caused by PEM (Bac 1983). In the 7-8 year-old group, 11% were "wasted" and "stunted" (p169). Kwashiorkor, due to insufficient protein intake, was reported as "mild" to "moderate". Mothers were not aware of the symptoms, causes or treatment of the disease (p171). Of the 7- and 8-year-olds 7,3% had pellagra caused by dietary inadequacy. Seventy-six percent of the daily energy intake of the children was derived from cereals, mostly maize, which did not provide the nicotinic acid needed. Thirty percent of respondents were of opinion that bread, maize and samp alone could ensure health. Important nutrients like vitamin A, iron and calcium were lacking in such diets. Little knowledge about the basic functions of food seemed to be a major problem. Apart from food fortification and supplementation, health and nutrition education for the entire population should be priorities (Bac 1983 p188). The problem of over-population is

also closely related to malnutrition and family planning should figure strongly in educational programmes.

These findings were borne out in a nationwide survey on underweight-for-age (when weight falls below 80% of the accepted international standard) carried out by the Department of Health (RSA) in 1980-1. It revealed severe nutritional problems in non-white population groups. The percentages for underweight children between six and ten years old were: whites 5%, coloureds 30%, Asians 31%, blacks 25%. There was a high incidence of 2 104 per 100 000 black preschool children (0-4 years) who suffered from nutritional diseases. In Ciskei up to 50% (and in some areas even 60-70%), of preschool and school age children were underweight (Hansen 1984).

Attempts to improve these negative aspects in the socio-economic standards have to a great extent focused on rural areas. The problems of rural communities were addressed shortly after independence. A Rural Development Plan was launched in August 1982 to improve the quality of life in villages. Within the Department of Agriculture and Forestry a Rural Development Council was set up to co-ordinate the functioning of village development committees (Sebe 1982). The Rural Development Department that was established was later incorporated into the Department of Agriculture.

In 1985 health care for rural Ciskei was supported by launching a system in which local village health workers were used. Mobile training units facilitate training lay workers appointed in each village. Their duties include preventive health measures, management of diseases like gastro-enteritis, correct feeding of babies and young children, and checking on immunisation. It will be shown later that a village health worker is attached to each Educare Centre. When carried out correctly, nutritional intervention programmes can have dramatic results (Bac cited in Hansen 1984). In his policy speech in 1986 the Minister of Rural Development revealed the urgent need to help rural communities to embark on self-help development with the aid of government and other resources. Programmes, to be introduced to cover the country as a whole in the shortest time possible, were day-care centres, community gardens, community health services, brick making, home industries and pig and poultry farming (Daily Dispatch 24/6/86). These plans would seem to be implementing some of Bac's recommendations.

The description given up to this stage in this chapter, has concentrated on the socio-economic and health conditions in Ciskei as a whole. The field work in this study took place in the Keiskammahoek district, and it is now necessary to examine these conditions in this area specifically.

The magisterial district of Keiskammahoek is situated between 27°E - 27°15'E and 32°33'S - 32°48'S. It corresponds closely to the drainage basin of the Keiskamma River above Fort Cox and nestles against the eastern end of the Winterberg range, locally known as the Amatola range (Mountain et al 1952 p3). The small town of Keiskammahoek is 38km from Stutterheim, 42km from King William's Town and 43km from Alice by road (see Figure 5).

The Nqika clan of the Xhosa occupied the area during the early nineteenth century, but after the 1850-53 war between the Xhosa and the Cape colony, the original group was expelled from the area and it was declared a 'Royal Reserve'. Europeans and 'loyal' natives were encouraged to settle there to cultivate the land. Groups of the Mfengu, who had assisted the Europeans against the Xhosa, entered the area from 1853. The Europeans who settled there were mainly Germans. Their farms were dispersed among the Mfengu freeholders, with the main concentration in the area surrounding the Keiskammahoek village, which was established in 1858 as a military village. Trading was permitted in the village under strict regulations. Other trading stations were permitted only near military forts or mission stations (Houghton & Walton 1952 p65). By 1948 there were 30 traders in the Keiskammahoek district of whom one was a black. Nine were operating in the village of Keiskammahoek; the other 21 were scattered in the district. The Keiskammahoek village had a commonage interspersed with farm holdings occupied by whites, coloureds and blacks. The village had about 250 white inhabitants (Houghton & Walton 1952 p5).

Provisions in the Native Trust and Land Act of 1936 led to the purchase of the land held by Europeans for the South African Native Trust (Mills and Wilson 1952 pl-3), a process which continued for many years. The whites who did remain were mostly from the Keiskammahoek village, the mission at St Matthew's and the Fort Cox agricultural school. By 1952 there were still 500 whites in the district (Wilson et al 1952 p2). Today

Keiskammahoek and Environs Nearest Towns, Roads and Railway Line

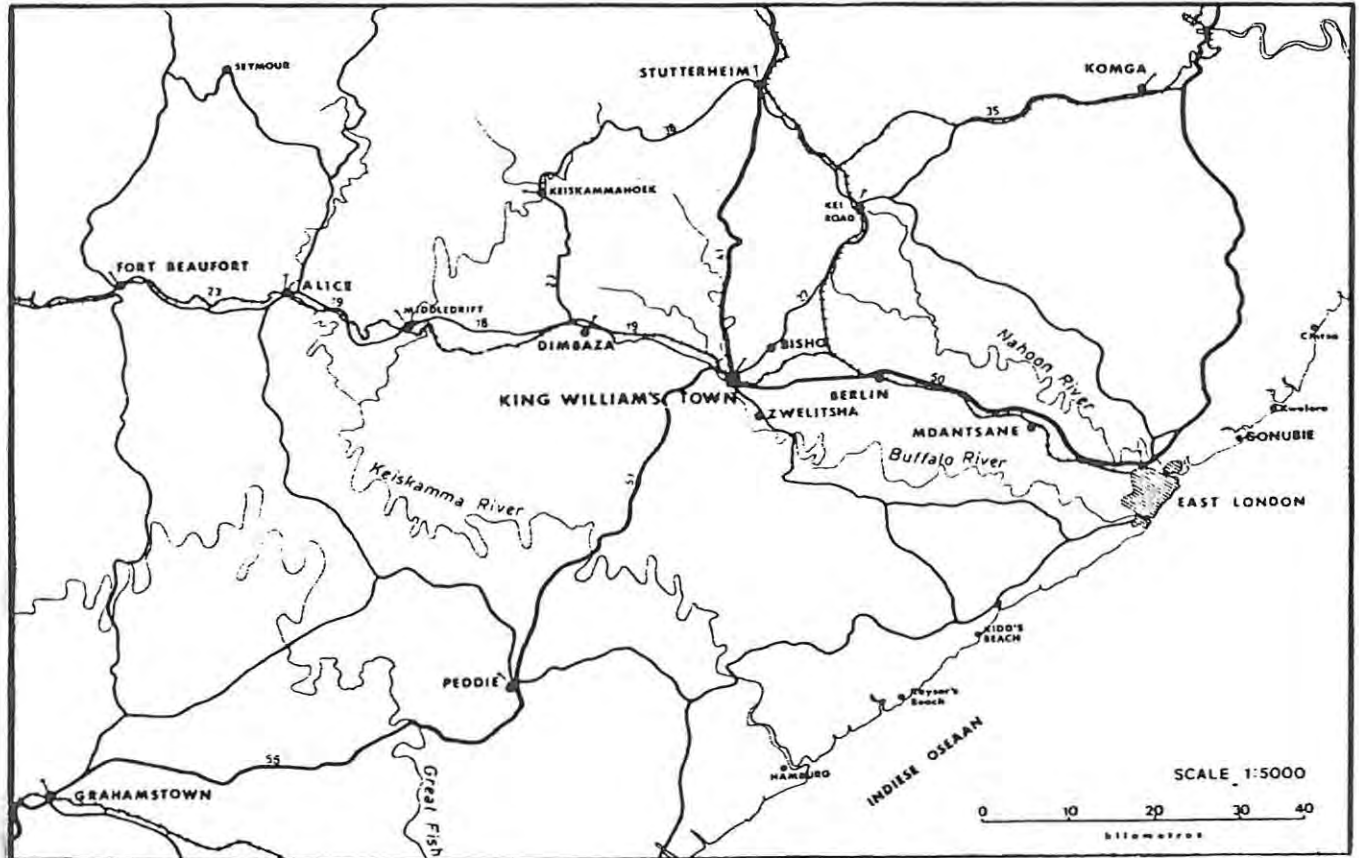


Figure 5

a few whites are attached to the hospital and agricultural undertakings. Presently the district is administered as a magisterial district of the Republic of Ciskei.

The Anglican mission station, St Mathew's, six kilometers from Keiskammahoek, originally provided medical and educational services, but, as has been explained, these have been taken over by the state and a new modern hospital, S.S. Gida, was built in Keiskammahoek in 1985. Apart from this impressive building other buildings in the village are the magisterial offices, an hotel, ten small trading stores, two butcheries, a market, seven eating houses, a post office, a garage, a bank, a private doctor's surgery, two church buildings, a Lower Primary School and the offices of the Mathole Circuit of the Department of Education. A bus service operates but does not serve all the villages and the frequency is limited, in some cases to as low as three times a week (Ciskei Directorate of Planning 1985). Medical care is made available in the district at various clinics. Figure 6 gives an indication of community services for the district.

Published population figures vary. According to a newspaper article the district has a population of approximately 50 000 people (Daily Dispatch 3 December 1985). The Ciskei Directorate of Planning (1985) uses a figure of 53 344. In October 1986 they worked on a population of 47 500, although one official figure was as low as 34 666. The size of the population and the fast growth rate pose problems as does the distorted age/sex composition due to absence of migrant workers.

Based on sample surveys age cohorts are supplied in Table 7:4.

Table 7:4 Age Categories for Population
in Keiskammahoek District

Age Range	Population
Over 60	3 997
21 - 59	21 282
6 - 20	20 500
0 - 5	7 565
Total	53 344

(Ciskei Directorate of Planning 1985).

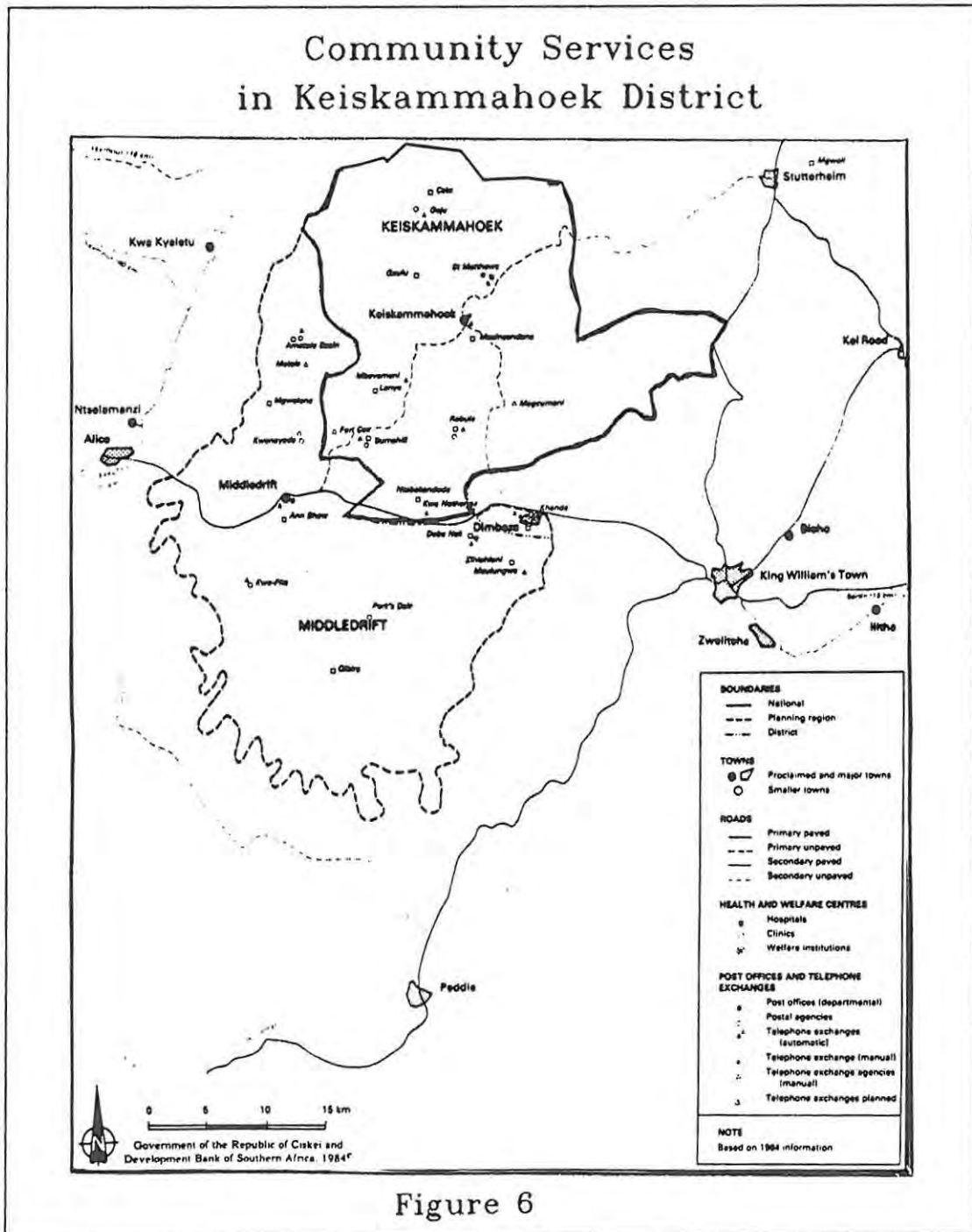


Figure 6

The Betterment Programme of the mid-1960's brought the population, previously scattered over the entire area, into consolidated rural villages (ilali) with a minimum of 101 and a maximum of 3 685 inhabitants. There are close on 50 of these villages. Population density has increased from roughly 28-30 per square kilometer in 1946 (Houghton & Walton 1952 p22) to as high as 404 per square kilometer in 1987 in Mthwaku (Ciskei Directorate of Planning 1987).

The residents of a village (ilali) fall under the jurisdiction of a sub-headman assisted by a village council or committee which is responsible to the tribal authority. There are two tribal authorities in this area: Keiskammahoek North and Keiskammahoek South. Each comprises the chief, salaried headmen and councillors. Sub-headmen also attend the meetings. Tribal authorities promote education, maintain roads and dams, improve economic and social life and preserve law and order.

A study done by Giliomee and Schlemmer (1985) estimates that, because of lack of employment within the district, there are almost two thousand commuters and 12 8484 migrant workers. Nearly 21% of the population are partially or wholly absent. This figure can be further subdivided: 16,5% are external migrant workers and commuters; 1,8% are internal migrant workers; 2,5% are internal commuters. In a resettled community in Keiskammahoek at Elukhanyeni where 3 000 people from Humansdorp, Doroskraal and Wittekleibosch were resettled in 1977-78, sixty-seven percent of economically active men had to become migrant workers for lack of job opportunities nearer home. Estimated employment figures for those who managed to get employment near their homes, are given in Table 7:5.

Table 7:5 Employment Figures for
Keiskammahoek District

Occupation	Number
Building & Construction	10
Local government	34
Urban business	132
Rural business	177
Industry	456
Government & parastatal	2 011
Farming	2 422
Informal sector	3 993
Pensioners	3 997
Total	13 222

The rural village of Cata illustrates the way of life in bigger villages and was examined by Whisson et al (1982). One-fifth of the members of the community are working away from home. A household constitutes an average of 7,5 people. Local government is carried out by a committee or council that assists a salaried headman who takes a seat in the tribal authority. Prominent buildings are the primary school, clinic, churches, agriculture office, two shops and a liquor store. An irrigation scheme was started as part of the betterment scheme in the 'sixties. Of the households 24 (5,8%) have access to level, irrigated arable land. Of the remaining drylanders, 59% have access to arable land, half-a-morgen in size. The community cannot generate enough income and is dependent on the wages of migrant workers and pensions. Lack of labour, cattle, tractors, capital equipment, such as fences or planters, money and organization, result in only half of the allotments of dryland being cultivated. Even the irrigation farmers failed to create a source of cash income for the community because their produce is sold in the village - bought with money from migrant workers.

Productivity in the whole area is very low, because of soil erosion, over-grazing and veld deterioration. Immigration and natural population growth has given rise to increased pressure on available land. In Burnshill, one of the villages in the Keiskammahoek District, for example, 58% of families are without fields or grazing rights. Land owning families, on the other hand, cultivate only small portions of their land because the remaining men are too old; many of the women work away from home and the children are at school and leave to work elsewhere when they have finished their schooling (Whisson et al 1982). The decreased production of maize, milk and pumpkins, and increased purchases of packaged food, not only affect the economic, but also the health level of families.

The results of a **medical** study carried out in Keiskammahoek at the St Matthew's Hospital were published by Thomas in 1981. Socio-economic factors underlying malnutrition were studied in more than 500 children. Three groups were identified: children who were well nourished; those who showed low weight-for-age but with no signs of kwashiorkor or marasmus; and those with obvious kwashiorkor. Circumstances of the middle group differed from well-nourished children mainly in degree of poverty. Both groups were in the care of own mothers with fathers supporting them though working away from home as migrant workers.

Less than half of kwashiorkor patients were in their own mothers' care. Sixty-two percent of the children were illegitimate. Many of the children were in the care of unsuitable guardians. Two-thirds of the mothers who did care for their children, were not supported by the fathers. Failure to support children was mainly due to desertion.

It was suggested that in the case of the middle group, poverty was the main cause for stunted children; and in the group where kwashiorkor was diagnosed, the main cause was disorganised and disrupted family life in a situation of poverty.

Attempts to improve the quality of life are similar to those in the other rural areas in Ciskei already mentioned. Major dams constructed on the Keiskamma river system are the Cata, Mnyameni, Sandile and Debe dams. Most villages not supplied by the dams have borehole water. The Keiskamma Irrigation Scheme, managed by Interscience Ltd for the Ciskei Agricultural Corporation, is the basis for dairy production. Pastures have been improved considerably. Selected families were settled there at a cost of R4,5m (Quail Commission 1980). Production methods, harvesting procedures and marketing are co-ordinated by the managers (Daniel 1982). According to a newspaper report, the number of commercial farmers was reduced from 60 to 27 and farm size increased from 4 ha to 12ha (Scheffer 1985). Smaller schemes, in Gxulu and Rabula, produce lucerne and vegetables. In the national context the Keiskammahoek district should be a major producer of food and other agricultural and timber products (Odendaal 1987 p42). Any likely industrial development from natural sources is limited to forestry and agricultural processing, e.g. the saw mill, furniture factory and dairy processing (Hill, Kaplan and Scott n.d.).

It is now necessary to examine the development of education in Ciskei as a whole. **School education in Ciskei** should be seen in the light of indigeneous African education which comprised the close interrelation of life and education and stressed the importance of rote memorisation. Real situations and concrete facts taught in a personal relationship constituted the learning situation. Then the western type of schooling arrived - greatly divorced from everyday life and at the time geared

towards rote repetition of meaningless formulas. The result was that rote learning developed very strongly and school education and real life were separated causing a discontinuity between school and cultural environment. Contemporary African education still displays this situation (Duminy 1971).

Missionary societies in Southern Africa saw the school as an important instrument for evangelisation and in all four provinces the initiative to erect schools for the black people came from the missionaries. Dr van der Kemp of the London Missionary Society established the first school in the present-day Ciskei in 1798 on a site near to King William's Town. Ciskei was the birth place of formal black education in South Africa. More schools followed of which Lovedale (1824), Healdtown and St Matthew's became well known names in the educational field. The administration of education for blacks was entrusted to each province when the Union of South Africa was established in 1910. In 1951 the Eiselen Commission recommended a separate state department to control black education. According to the Bantu Education Act No 47 of 1953, the central government took control of black education and in 1958 the Department of Bantu Education became responsible for all educational activities in Ciskei. Decentralisation followed when the Regional Authority in the homeland of Ciskei became the governing body through its own department of education in 1961. In 1972 a Legislative Assembly with autonomy was instituted with its own Minister for Education and from 1981 the Ciskei Department of Education has functioned as a state department of an independent black state (Engelbrecht & Lubbe 1981). Close links with the Republic of South Africa are maintained and matriculation certificates and teaching diplomas are issued by the Department of Education and Training in Pretoria.

According to Crause et al (1982), low levels of literacy, significant school drop-out rates and relative high teacher:pupil ratio's are major problems in Ciskei's educational development. It was not possible to institute compulsory education when the Ciskei Education Act vested all control in the Ciskei Government in 1974, because of several reasons. The first of these was a lack of funds. A second major problem, which is still encountered, was a shortage of schools and classrooms. De Wet and Bekker (1985) found over 52% of teachers had more than 46 children in their classes and in some instances class size was as high as 68 pupils. In 1981 there was an estimated backlog of 1 000 classrooms and

it was estimated that 40 000 pupils were learning in poor accommodation. A shortage of basic needs results in pupils sharing desks and books. Whenever possible, funds are used to extend school provision. During the 1985/86 financial year 24 primary schools (comprising 193 classrooms) and ten secondary schools (with 89 classrooms) were built (Pityi 1986). Even though the budget for 1986/87 was R93 000 000, with an increase of almost R17 000 000 for the year, it was mainly used for salary increases.

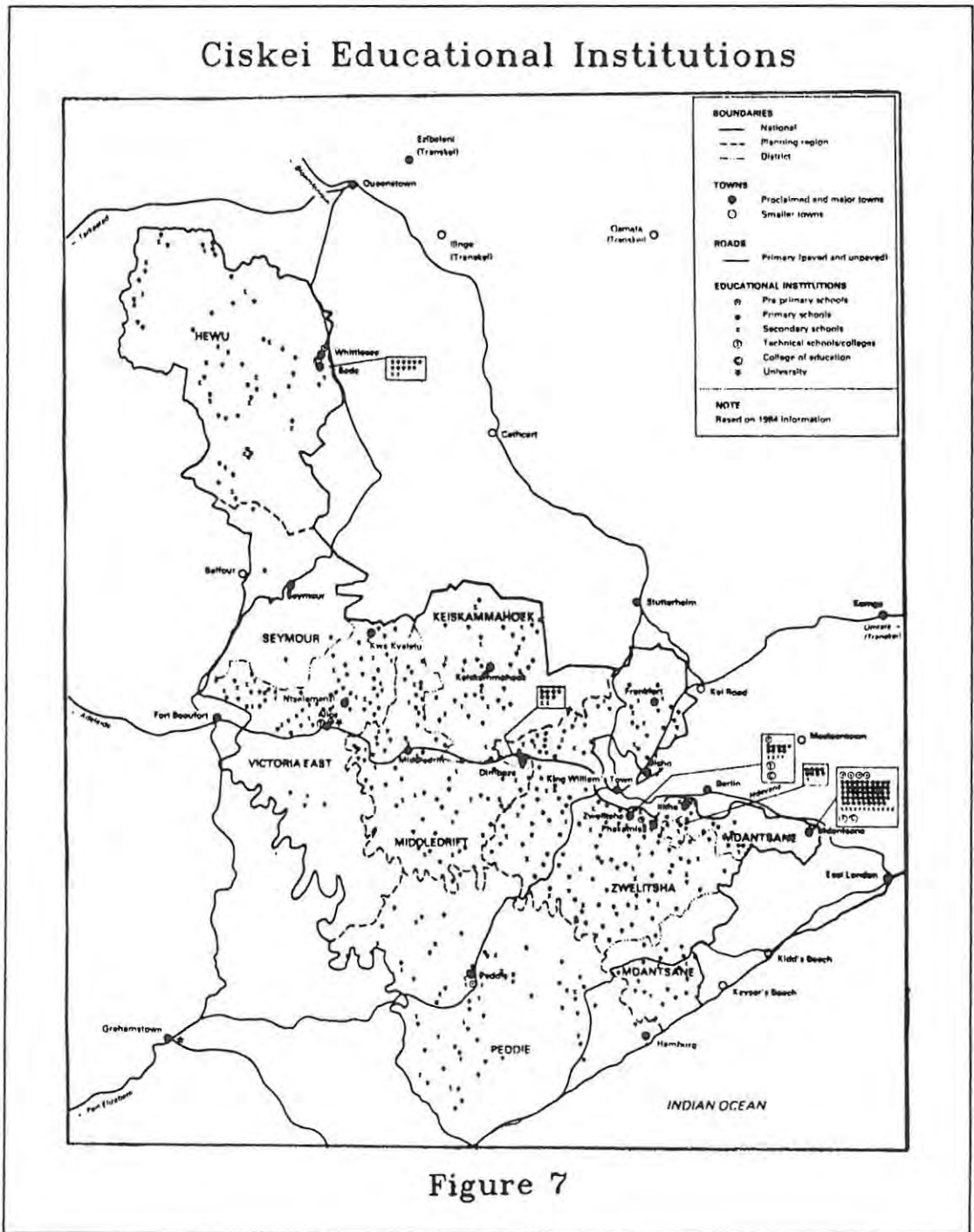
A third major problem is a lack of qualified teachers. As already mentioned the **teacher:pupil ratio** is high. For the different population groups in South Africa in 1980 it was 1:19 for whites, 1:29 for coloureds, 1:26 for Asians and 1:46 for blacks. According to the 1984-85 annual report of the Ciskei Department of Education, it was 1:44 for Ciskei; it is claimed that the 1986 figure is a slight improvement.

Presently **educational provision** is made from limited preprimary instruction through to university education at the University of Fort Hare (see Figure 7). A summary of the 1986 figures (Ciskei Department of Education 1987) is given in Table 7:6.

Table 7:6 Educational Provision in Ciskei

Phase	Schools	Enrolment	Teachers
In-service training	1	Part time	7
Preprimary	15	1519	51
Primary	529	194971	4559
Secondary	152	45576	1858
College of Education	3	1418	100
Total	700	243484	6575

Primary school attendance is very satisfactory and was given as 93% for 1986. In the same year there were 44 907 pupils in Sub A (Carstens et al 1987 p14). Of the total population 24% were of schoolgoing age (i.e. between five and nineteen years old). Of this number 244 392 were at school (SSA - Std 10), i.e. 16,5% of the total population and 52,6% of a possible schoolgoing population (Carstens et al 1987 p5). In 1986 a total of 4 952 candidates sat for Std 10 examinations; of these 427 passed with matriculation exemption, while 1 428 passed with a school leaving certificate, giving a total of 1 855 passes and 3 097 failures (Carstens et al 1987 p16). Forecasts indicate a steady increase in



enrolment: 251 500 (1987), 259 100 (1988), 266 700 (1989), 274 500 (1990) and 282 200 (1991) (Carstens et al 1987 p13).

Teacher training is an important aspect of the educational picture. Existing institutions at the time of writing were Lennox Sebe, Dr W.B.Rubusana and Masibulele Colleges of Education with a total enrolment of 1418 in 1986. Plans have been drawn up for a new College of Education at Whittlesea where another 600 students will be accommodated. Courses offered are the Secondary Teachers' Diploma and the Primary Teachers' Diploma (Std 10 plus 3 years of study). The most urgent need is, however, the improvement of primary school teachers' qualification because most of them hold a standard 8 certificate plus the Primary Teachers' Course (PTC) which was a two year course. The situation in Ciskei is worse than in the national states and schools of the Department of Education and Training where close on 50% of primary school teachers fall in this category (Carstens et al 1987 p20). The alarming figure of 61% of Ciskeian primary school teachers falls in this category. To improve the situation, serving teachers will get the opportunity to have their qualifications upgraded at the Lovedale College where full time Primary Teachers' Diploma courses are to be offered from 1989 for teachers who have passed standard 10 (Ciskei Department of Education 1986 p11). Up to 1981 a standard 8 qualification was adequate admission for the now obsolete PTC. The figures in Table 7:7, supplied by the Development Bank of Southern Africa (1985), indicate a drop in candidates for teacher training when standard 10 was set as minimum entrance qualification.

Table 7:7 Number of Candidates for Teacher Training

Year	Enrolment
1979	2 615
1980	2 115
1981	1 268
1982	557
1983	661
1984	977
1985	1 418

Important for this study, is the consideration of **drop-out rates**. Educational wastage is particularly common in developing third world countries. Drop-outs constitute an unemployable population of school leavers (Brimer and Pauli cited in Nyikana 1982). Alarming figures from

an Unesco survey, done in 1972, are cited by Nyikana (1982). The highest incidence of repeaters was found in Africa, namely 40,7%, compared to Asia (10,3%), Latin America (5,3%) and Europe (3,6%). Sub-standards had the highest incidence.

According to the HSRC report, cited by Scrooby (1986), the following percentages of the 1971 school beginners in the RSA reached standard two (four years later) in 1974: blacks: 42%; coloureds: 52%; Asian: 83%; whites: 92%. It is clear that the black school beginner who has to adapt to a westernised education system finds many obstacles in his way. Not only is pupil repetition wasteful, but it also brings along tension and may erode human dignity (Scrooby 1986).

In Ciskei, the incidence of repeaters and drop-outs is very high. In 1975 admissions to Sub A in Ciskei were 15 702 of whom 10 128 passed (64,5%); of each 1 000 Sub A pupils in 1975, 239 dropped out; 116 repeated Sub A in 1976, and 645 were promoted. Of the 645 Sub B pupils in 1976, the drop out rate was 134 (20,8%), repeaters were 65 and 446 were promoted to Std 1 (69,2%). Over seven years pupil wastage was 1 564 (30%). Economically speaking only 70% of the expenditure was profitably used (Nyikana 1982).

The figures for repeaters in later years do not show much significant improvement, as they range from 12,4% in 1977 to 11% in 1980 (Nyikana 1982). Nicol (1980 p7) reports a 31% failure/drop-out rate between Sub A and B in Ciskei in 1979. Nyikana (1982) analysed percentages of repetition according to circuits over four years (1977 - 1980). His findings are presented in Table 7:8.

Table 7:8 Pupil Repetition in Ciskei

Circuit	Percentage
Mathole	17,9%
Zwelitsha	11,4%
Mdantsane S.E.	11,1%
Mdantsane	10,7%
Peddie	10,4%
Alice	9,0%
Mdantsane Central	8,3%
Hewu	7,9%

Wide differences exist between the circuits. Some percentages, such as for Hewu, were as low as 7,9%, whereas the Mathole circuit, which is the circuit from which sample schools were drawn in this investigation, recorded 17,9% in the years 1977 to 1980 (Nyikana 1982). In this circuit no link was found between the size of the school and the percentage of repeaters in 1978. Contrary to what is normally expected, schools with the highest pupil:teacher ratio did not have most repeaters. The following examples in Table 7:9 illustrate this.

Table 7:9 Class Size and Pupil Repetition

Ratio	% Repeaters
1 : 67	10,5%
1 : 48	38,9%
1 : 37	6,9%
1 : 34	28,7%

The estimated pupil outflow at different levels of education for 1985 for Ciskei is presented in Table 7:10.

Table 7:10 Pupil Outflow and Enrolment in Ciskei (1985)

Illiterate	Semi-literate	Literate	Jr Sec	Sr Sec
Schoolleavers without SSA	Obtained SSA - Std 2	Obtained Std 3-5	Std 6-8	Std 9-10
11 500	6 100	4 800	7 000	4 400
Enrolment:				
44 515	85 099	66 072	41 499	12 929

Source: Carstens et al 1985.

The drop-out rate in Sub A is very high at 25,8%. In the remaining primary classes it is 7% and at Junior Secondary level it rises to 17%. The very high figure of 34% in the Senior Secondary phase, however, includes pupils who passed standerd ten and consequently left school.

With alarming figures as have been quoted, there is a need to investigate reasons for pupil-repetition. The Research Unit for Education System Planning of the OFS undertook research to identify reasons and suggest ways to eliminate this (Nyikana 1982) because the cost involved in reteaching pupils is high. It was, for instance, estimated at 5 million rand in KwaZulu in 1979 (Mdluli cited in Nyikana 1982).

A general survey by Kohn and Rosman (1974), shows that rejection, neglect and disorganised family life result in low task orientation and consequently in failure. It has been suggested previously that traditional black school beginners find their first encounter with formal schooling bewildering. The effect of the western way of life on traditional Ciskeian families and the influence of certain home background aspects on the education of the children, was investigated in a sample of 1 496 families in representative urban and rural areas by Terblanche (1983). It was found that westernisation has brought cultural duality to the Xhosa child, who is instructed in traditional values and norms at home, but is confronted with a kind of westernised education at school.

De Wet and Bekker (1985) identified some important reasons for drop-out tendencies in Ciskei. Low educational standards of parents (64% had not obtained a Std 6 certificate) were seen to have a negative influence on motivation of school children, as did overcrowded homes and little time and control over homework. The fact that 37,5% of families had no male adult residing in the home, could contribute to undisciplined behaviour in children. This makes the task of the male teacher all the more important because he becomes an identity figure for the boys "without" fathers.

Reasons for high drop-out rates suggested by teachers in Nyikana's (1982) study, include the financial burden for parents, disinterest on the part of parents, "starvation" and corporal punishment. They are of opinion that a feeding scheme and free books could do much to keep children at school. He also interviewed principals of schools and inspectors who suggested that four further factors should be remembered: irregular attendance, due to a lack of parental interest, or the fact that boys are needed to herd cattle and girls to look after babies; working parents are not involved in their children's education; bad weather conditions, which prevent children from coming long distances on foot, and illnesses keep them at home; and poverty resulting in malnutrition is often the cause for illnesses. The high pupil:teacher ratio must also be noted as this makes it impossible for even the best teachers to establish personal contact and supervise assignments properly.

The quality of teacher training (both academic and professional) and poor teaching facilities (buildings, furniture, textbooks, equipment, teaching aids) have also been mentioned in the survey in this chapter of the educational structure in Ciskei. It is very possible that all these factors contribute to both the high wastage and repetition rates in the country.

Strong recommendations were made in the De Lange Report (1981) for a pre-basic phase to ensure that school beginners are ready for formal schooling, but this has not yet been introduced to the Ciskei in any large-scale way. A Sub A readiness programme, Threshold, (compiled by Grove 1981) was, however, introduced in a sample of schools in February 1987. The inspectress for Lower Primary Schools offered a course for teachers of 14 experimental schools to introduce this programme in their schools. The same programme was started in departmental preprimary schools for the 5-year-old group (Nongogo 1987).

It is now necessary to examine more closely the educational provision in the area of investigation of this thesis. The magisterial district of Keiskammahoek is part of the Mathole circuit, which also includes schools in the Middledrift district and Dimbaza town (see Figure 8). Missionary societies, like that of the Anglican Church which provided services of dedicated staff for the St Matthew's school, have contributed greatly to the educational activities in the past. The Department of Education is presently providing a good network of schools and educational levels are improving.

In the Keiskammahoek area there are five High Schools, five Junior Secondary Schools, one Lower Secondary School, 24 Primary Schools, ten Lower Primary Schools, and two Community Schools (Ciskei Directorate of Planning 1987). The primary schools, in March 1984, had an enrolment of 12 039 and there were 3 567 pupils in secondary school (Development Bank of SA 1985). The total schoolgoing population (6 - 20 years old) for 1984 is given as 20 500 (Ciskei Directorate of Planning 1985) which means that 75% of the possible schoolgoing population were in fact attending school. School enrolment according to standard in 1984 is presented in Table 7:11.

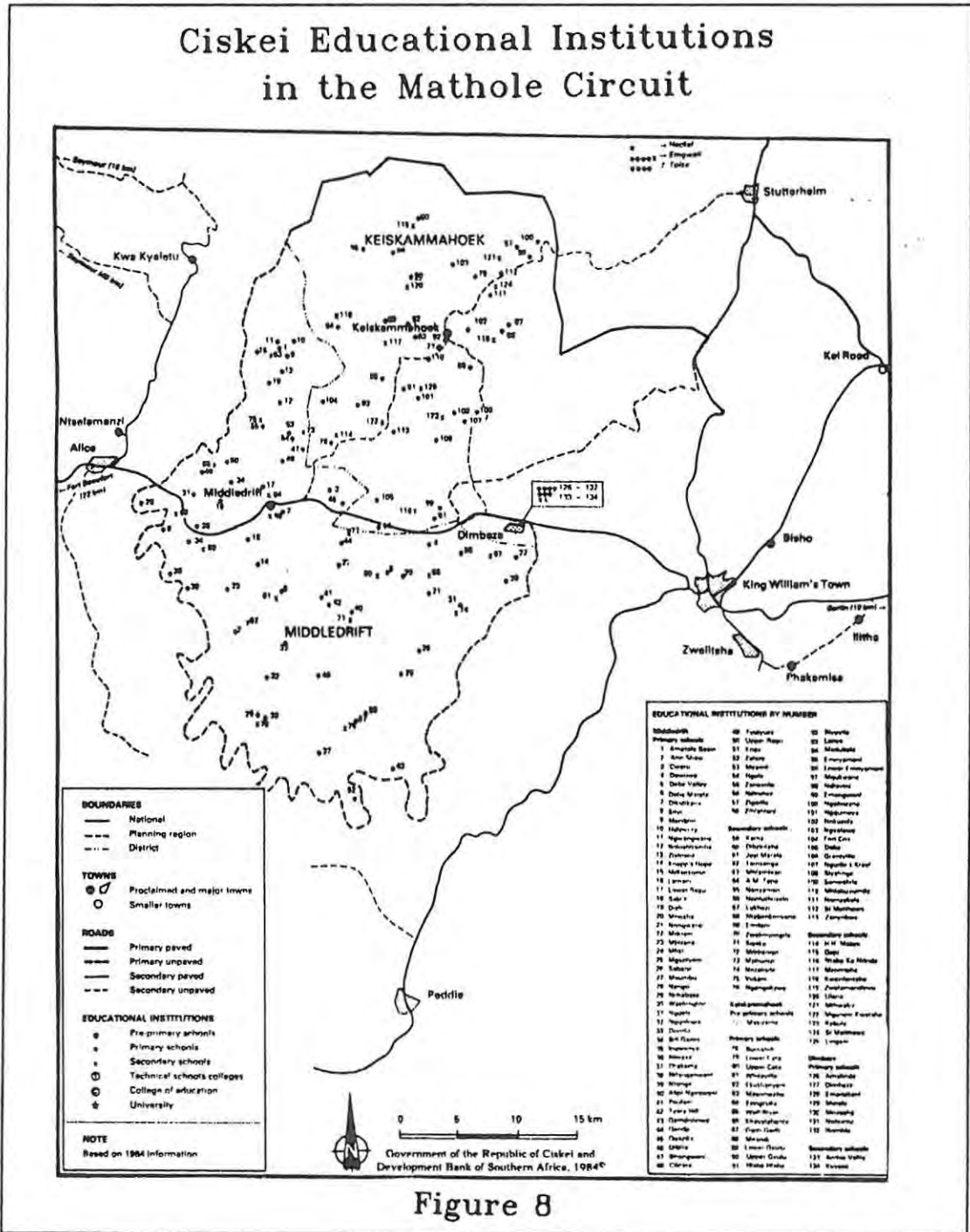


Table 7:11 Pupil Enrolment in Keiskammahoek District (1984)

Primary School		Secondary School	
Sub A	2 622	Std 6	830
Sub B	1 888	Std 7	795
Std 1	1 606	Std 8	880
Std 2	1 597	Std 9	643
Std 3	1 451	Std 10	226
Std 4	1 324		
Std 5	1 551		

Source: Development Bank of SA

The Department of Education's figures on average pupil-teacher ratios in 1986 were 1:41 in primary schools and 1:31 in secondary schools. The extremes of the range, however, were very great with figures as low as 1:21 and as high as 1:74 (Ciskei Department of Education 1987).

The magnitude of the problems faced in formal education in Ciskei, raises the possibility of whether the exposure to a more stimulating learning environment, provided by preschool experience, could help counteract some of the negative aspects. In the next chapter the provision of such education is described.

CHAPTER EIGHT

PRESCHOOL EDUCATION IN CISKEI

WITH SPECIAL REFERENCE TO KEISKAMMAHOEK DISTRICT

Traditionally the black preschool child is guided by the parent (boys by the father and girls by the mother) to fulfil culturally defined sex roles: to herd stock or perform household chores (Crause et al 1982). With the advance of western education and modern technology, another approach is needed to prepare the preschool child for his future role. This could well be provided by quality preschool care of which very little has been offered in the past.

Since 1978, when attention was drawn to the needs of preschool children during preparations for the 1979 International Year of the Child, the Ciskei Education Department has shown keen interest. In that year the number of Ciskei preschool children catered for in the four existing creches were 320 out of an estimated total number of 105 000 preschool children (Nicol 1980 p65). A meeting was called on 14 April 1978 by the East London and Border Society for Early Childhood Education to discuss the development of early childhood education in the Ciskei and how the S.A. Association for Early Childhood Education, with the co-operation of the East London and Border Society could assist the Education Department in this (Nicol 1980 p57). The establishment of an Early Learning Centre to co-ordinate preschool development in the Border and Ciskei area was identified as a high priority.

The Ciskei Department of Education had undertaken in 1978 to pay the salaries of professionally trained teachers in preprimary schools. Although on a very small scale, Ciskei was the first national state in South Africa to incorporate preschool education into the national education system. Lack of funds, however, restricted development and no allocation was available for equipment or buildings.

Preschool facilities for blacks in the Greater East London Area and Ciskei in 1980 are described in detail in a report brought out for the

Urban Foundation (East London Region) by Nicol (1980). The reader is referred to this report for details. As will be described later, the outcome of Nicol's research was the opening of the Border Early Learning Centre (BELC) in April 1982 in East London.

By 1980 a total of eight nursery schools, six of which were run by the Department of Education, were providing facilities for 717 Ciskeian preschoolers, virtually doubling the provision from the previous year. Most of these were private schools, having been started privately as creches by church groups, and were then taken over by the Department of Education. Despite this increase in provision only 0,45% of the appropriate population group could be accommodated in these schools. It should be noted moreover that more than half of the children in preschool institutions were concentrated in the three centres in the urban area of Mdantsane. It is clear that provision of preschool education in rural areas was almost non-existent (Nicol 1980 p3).

After 1980 the Education Department continued its policy of encouraging communities to start their own nursery schools and then registering and giving them aid if they met departmental standards. This policy led to another doubling of pupils between 1980 - 1985 (Ciskei Department of Education 1986). From this year onwards the statistics are sufficiently detailed to indicate enrolment and the number of teachers at each individual school and to calculate the teacher:pupil ratios. These figures are presented in Table 8:1. In his Policy Speech in June 1987 the Minister of Education reported that "great strides have been made ... but the increase gives little room for satisfaction when one takes into consideration the large number of preprimary school going age pupils in Ciskei" (Pityi 1987 p26). It is, however, clear that this aspect of education is considered important in Ciskei.

As can be seen in Table 8:1 there is a big difference in teacher:pupil ratio amongst the various schools and consequently differences in quality of teaching can be expected. The range varies from 1:22 through a number at 1:40 and with one reaching as high as 1:76. Such ratios would be regarded as completely inappropriate in white schools and registration would be refused. In such circumstances these schools could not be expected to follow the conventional nursery school programmes as described in chapter four and certainly could not follow the structured or compensatory programme which some authorities regard

as relevant for children from "deprived" or "disadvantaged" home backgrounds.

Table 8:1 Growth of Government Preschools in Ciskei: 1985-1987

Circuit	Enrolment			Teachers			Ratio			
	1985	'86	'87	'85/86/87			1985	1986	1987	
Alice:	96	82	89	4	4	4	1:24	1:21	1:22	
Hewu:	130	85	117	2	2	2	1:65	1:43	1:59	
Mathole:	118	123	85	3	3	3	1:39	1:41	1:28	
Mdantsane										
Central:	125	115	188	7	7	6	1:18	1:16	1:31	
	114	113	151	6	6	6	1:24	1:19	1:25	
	58	139	108	3	3	3	1:19	1:46	1:36	
	150	116	146	3	4	4	1:50	1:29	1:37	
		81	102		1	3		1:81	1:34	
			80			3			1:27	
Peddie:	92	94	92	3	4	2	1:31	1:24	1:46	
		43	66		2	1		1:22	1:66	
Zwelitsha										
North:	222	171	230	7	7	7	1:32	1:24	1:33	
		84	113		2	3		1:42	1:38	
		50	50		1	2		1:50	1:25	
			151			2			1:76	
			60			2			1:30	
			71			2			1:35	
			62			2			1:31	
			62			2			1:31	
Zwelitsha										
South:	169	132	126	2	2	2	1:85	1:66	1:63	
	79	91	137	4	3	3	1:20	1:30	1:46	
Total 1985	11 schools			1383 pupils			44 teachers			1:31
Total 1986	15 schools			1519 pupils			51 teachers			1:30
Total 1987	21 schools			2286 pupils			64 teachers			1:36

Source: Ciskei Department of Education

Sporadic opportunities to obtain professional qualifications in preprimary education have been made available. As early as 1974 a Mdantsane institution provided some training in preprimary work, and 16 students completed a one-year course of study to qualify them as preschool assistants (Tabata cited in Nicol 1980). In 1978, 28 students took the two-year Junior Primary (Preprimary) course at the Zwelitsha Teachers' Training College. At that time entrance qualifications were a good junior certificate (Nicol 1980). Obviously the number of qualified teachers is still totally inadequate. Under ideal circumstances there should have been 1 200 teachers in Mdantsane itself (Nicol 1980 p66). In 1983 a one-year in-service course was offered as an emergency scheme at the Rubusana Training College in Mdantsane and 26 teachers qualified (Manjezi 1987).

At the time of writing, teachers without preprimary training can attend the Border Early Learning Centre (BELC) in East London for in-service training. There are, however, too many applicants for the facilities: in 1986 there were 200 applicants (including supervisors of Educare Centres from rural areas) for 50 places.

Full professional training of teachers has only recently been considered again. The Primary Teachers' Diploma (Preprimary) is being offered at the Rubusana and Masibulele Colleges of Education as from 1988; the first two years of the course comprise the regular syllabus for the Primary Teachers' Diploma (Junior Primary) and the third year is a specialisation course in preprimary work. This means that the first group of students will complete their studies at the end of 1990 (Nongogo 1988). Further opportunities for existing teachers are also being explored. Manjezi (1987) reports that two stages of specialist training for preprimary work are being envisaged, if financial support from South Africa is forthcoming. The first stage will be to improve existing two-year trained teachers' qualifications so that a Primary Teachers' Diploma can be obtained. Such teachers will then be able to take a specialised course in preprimary work. Such a programme, however, will take a teacher several years to complete.

The urgency for extended training programmes can be illustrated by considering the qualifications of teaching staff. It is apparent that only one quarter of the cases presented in Table 8:2 had received specialist preprimary training, although all but three had had some general primary school qualification. The disadvantage of a primary school training, however, is that the teachers may disregard the developmental approach and follow a more formal approach leading to a too early introduction to literacy and numeracy. Nor would they easily adapt to the more formal preschool models such as the Bereiter and Engelmann programme, without specific in-service training.

Table 8:2 Qualifications of Teachers in Preprimary Schools 1985

Qualification		No.	Total
Preprimary Trained	Diploma in Nursery Education	: 3	
	Preschool Certificate	: 1	
	Preprimary Teachers' Diploma	: 3	
	Teacher Aide Programme	: 4	11
Primary Trained	Primary Teachers' Course	: 9	
	Lower Primary Teachers' Course	: 5	
	Junior Primary Teachers' Course	: 8	
	Native Primary Lower	: 5	
	Infant School Teachers' Course	: 3	30
Untrained		: 3	3
Total			44

Source: Ciskei Department of Education

To ensure proper control, four inspectresses were appointed for Lower Primary work, including preschool education, soon after the initial interest shown by the Department of Education in 1978 (Nicol 1980). By 1987 there was an inspectress of Junior Primary Education attached to each of the seven circuits. Preprimary schools are also under their supervision (Nongogo 1987). The Ciskei Department of Education is only the third Department South of the Zambezi that has employed more than one inspectress for Lower Primary Schools (Pityi 1986).

It has already been suggested that financial implications have also curtailed preprimary expansion. Applications for preprimary buildings are considered by a recently established Preprimary School Building Project (Pityi 1987 p44). Immediate plans are to replace 15 existing departmental preschools, presently housed in church halls, with proper buildings (Poho 1987). In the Education Budget for the 1987/88 financial year, R55 000 was set aside for the running of nursery schools, but parents are also expected to contribute amounts varying from R3 to R5 per month towards the expenses.

Three registered preschools were visited as part of the present research to obtain some indication of such schools in action. The best school seen was one that caters for 100 children, even though, with only two teachers, the teacher:pupil ratio was as high as 1:50. Many of the requirements for quality preschool education, such as size of the buildings, staff qualifications and proper equipment, were met in this school. It has the use of three classrooms in a Lower Primary school, as well as a small hall for inside activities that need space. One classroom is used for crafts, one for the 3-year-old group and one for the 4- and 5-year-old group. The two teachers are preprimary trained (a one-year Preprimary Diploma after the Primary Teachers' Certificate based upon a Junior Certificate). They had also been attending further training sessions at the Border Early Learning Centre. Their knowledge was put to the use of a group of supervisors when they offered them a week-long intensive training course. Their preschool is also used to demonstrate to supervisors the running of a proper preschool. Separate files are kept for each 5-year-old child to show his progress in the school readiness programme they follow.

The second school is housed in a very old hall. For 150 children the space is far too small and the 3-year-old group has to move to a nearby

church for their activities and return for their midday meal, which is of very good quality. Provision of equipment is totally inadequate and lack of proper storing space is a problem. There is no outside equipment.

A church building is used to accommodate the 85 children of the third school. It is difficult to cope with all age groups in one venue, nevertheless a good preschool programme is offered and equipment is adequate. The principal and her two assistants attended the one-year course in preprimary work at Rubusana College in 1983. Their specific qualifications would seem to be the key to their success.

From these few examples it is clear that there are many obstacles, but that many teachers make the best possible use of what is available. These visits show a number of differences among the departmental schools themselves, despite the fact that they all are inspected and financially supported.

Privately run preschools face even more problems as the salaries of their staff are not met by government grant. They are dependent on public support and parental contributions. Evidence of the public's support comes from welfare societies, church groups or individuals. One of the first schools was started by the St Francis Anglican Church in Mdantsane in 1979 with the support of white welfare societies and a church group. The Ciskei Society for Early Childhood Education, which existed in Mdantsane in 1980, and the East London and Border Society for Early Childhood Education proved of great assistance to Ciskeian preschool centres by organising training courses and providing waste material and management expertise (Nicol 1980 p16). Another association, Friends of Ciskei, sponsored a creche on a monthly basis to provide for salaries, food and general expenditure in 1980. The Cecilia Makiwane hospital ran a creche for children of the staff. Individuals like Mrs Kota, a highly qualified preschool teacher, started a preschool class in Alice to fulfil a tremendous need in that area. This class was later registered with the Department of Education (Nicol 1980). The preschool division of the Phambili Mawethu project, which is the focus point of this investigation, and which is described later, is also an example of individual initiative.

To establish an idea of the standards and conditions at privately run nursery schools, a visit was paid to one in Zwelitsha. Staff members at such schools often lack training. In this case the principal holds a Primary Teachers' Certificate (based on a Junior Certificate) while one assistant has a matriculation certificate and the other two have standard nine. All four teachers, however, attend the weekly Border Early Learning Centre in-service training courses and mothers take turns to supervise activities while they are away. The training of para-professional staff is imperative in the light of the great shortage of trained teachers. The fees at this preschool are higher than the departmental school fees (R10 per month). A parent committee is responsible for the administration. Because the church building they use during the week is regularly used for Sunday services, all equipment must be removed on Friday afternoons. This places an extra burden on the shoulders of the staff, but they give their services with a very positive attitude.

Although the schools visited seemed to have positive aspects, the researcher gained the subjective impression that there was a tendency to neglect individual creativity and spontaneous learning. The visits were, however, not extensive enough for this to be confirmed.

At this stage it is appropriate to examine the more informal structure which goes under the name of **Educare Centres**. This term was coined by the Grassroots Education Trust in the Cape to show that both education and care aspects are of equal importance. Education of an informal character according to a developmental approach assists the child in growing socially, emotionally and intellectually. Care of the physical growth and well-being of the child is expressed through health and nutrition regulation and the very important provision of a place of safety while parents work.

Reports and investigations of the early 1980's had stressed the almost total absence of preschool facilities for rural areas in Ciskei. Financial limitations and teacher supply clearly would prevent a major expansion programme. Informal Educare Centres could be a possible alternative.

In order to execute such a comprehensive task, the people responsible for the daily supervision and guidance of young children, need special training. In other parts of South Africa there already existed much valued Early Learning Centres which provided training programmes and expertise. In the Border area a steering committee was elected in 1981 to arrange for the establishment of an Early Learning Centre. It amalgamated with the existing Executive of the East London and Border Society for Early Childhood Education and succeeded in establishing the Border Early Learning Centre (BELC) in 1982. Premises were leased to the BELC by the Roman Catholic Church in central East London. Although not situated in Ciskei geographically, it serves Ciskei. The BELC is entirely dependent on grants and donations from businesses, trusts and friends.

As mentioned earlier, the purpose of the centre is to co-ordinate all preschool development in the Border and Ciskei area. It provides advice and support services to existing preschool centres as well as multi-racial in-service teacher training programmes and parent education programmes. It also acts as a resource centre by providing basic equipment at low prices and storing waste products for distribution to preschool centres. Later developments were book and theme libraries. A demonstration preschool on the premises offers excellent opportunity to show in practice what is taught during training programmes.

Training programmes and assessment of standards obtained by students initially proved to be a major problem. After a great deal of negotiation the Early Learning Resource Unit (ELRU) in Athlone agreed to the use of their training materials, consisting mainly of a programme produced by Short, if suitable trainers could be appointed. Rhodes University was approached for academic approval of the programme and for assessment of students and subsequent recognition of their training. The university authorities could not provide assessment and recognition because the entry requirements were not of university standard. The types of people admitted possess such a wide range of backgrounds that it is difficult to get a common basis on which to start training. Because the trainers at that stage did not feel themselves qualified to do the assessment, the training culminated merely in obtaining an attendance certificate. There were also many problems attached to assessing, in the classroom situation, the practical implementation of theoretical knowledge obtained

in lectures. BELC staff could not do proper follow-up evaluation to establish how students were operating as a result of their training. The teaching practice component which is normally considered very important in any teacher training was difficult to assess. Travelling costs and distances to preschools would have claimed the time of staff who had many other duties to perform.

Other problems included the possible setting of entry requirements for the training, the number of people needed for proper training and the provision of their salaries. The question of state support for the programme hinged on the distinction that can be drawn between in-service training for people who have had initial training, and which could result in upgrading and producing a more effective work force, and short-term in-service training for people with no previous qualifications. This latter kind of training may not be long enough or intensive enough to be equivalent to pre-service training and may not show the same results. Since the Ciskei government has not provided in-service training in any appreciable way, there is no government institution to be called upon to set up and guarantee a reasonable level in preschool centres. Initial growing pains in the BELC training programme have, however, been eliminated largely as time has passed.

The initial Teacher Aide Programme, developed by the Early Learning Resource Unit in Athlone, was constantly evaluated and developed into the Teacher Educare Course. Apart from these weekly lectures, an Intensive Preschool Training Programme of two weeks' duration is offered at intervals.

In its first years of existence the BELC was mainly concerned with work in and within close vicinity of East London. It was soon to extend its influence into rural areas also. In rural Ciskei the ideas about early childhood education were first put into extensive practice from 1984, in the magisterial district of Keiskammahoek. This activity had a ripple-effect throughout Ciskei. The new activity in Keiskammahoek was built upon previous sporadic attempts to provide preschool education, such as the project sponsored by Kindernothilphe, a German organisation, which created, in 1978, a 50-pupil day-care centre at Gwili-Gwili. In the adjacent Middledrift district there were three short-lived creches which had been started by the Department of Health and Welfare.

An important innovator was a Mrs Glendyr Lorentz, who provided considerable information about the early stages of rapid expansion of preschool work in Keiskammahoek through personal interviews. She was previously involved in similar activities in Bophuthatswana and Transkei. After deliberations with St Matthew's Mission she started a preschool centre on 16 April 1984 in some rondavels at St Matthew's Mission for the children of the hospital staff and from local communities. She did not, however, impose her ideas upon the community. A committee of teachers and nurses had already, before she arrived, unsuccessfully applied for a grant for a creche from Kindernothilphe. On the first day 17 children arrived; by the end of the month there were 40 from the immediate surroundings. Jane Rennie of the Mission's Children Home volunteered to help with the preschool activities in the morning. Mrs Nkwatani, who had primary teaching experience, and two ladies from the St Matthew's Mission comprised the staff. The children were given a biscuit and fruit juice at mid-morning and a lunch of mealie meal and stew or soya soup at noon. Parents paid between R2 and R10 per month, according to earnings, but this could not cover expenses and the balance came from Lorentz's pocket for the first month. Hunger Relief Fund and Operation Hunger were then approached to provide food. With a donation of R50 from St Matthew's Mission, essential equipment was bought. The Border Early Learning Centre in East London also contributed various articles. Costs were approximately R350 per month for the first six months (Lorentz 1986).

Nurses approached her to start work in the children's ward at St Mathhew's hospital. A once-a-week programme of two hours was started. One of the doctors donated R50 towards the undertaking. In reply to a letter she wrote to women's church organisations, she got various donations of toys or money. Financial aid was, however, needed to carry on with the project.

Other needs in the community were also brought to her attention. Responding to a local plea, her motivation report in May 1984 outlined the possibility of starting a day-care centre for children of farmers in the Keiskamma Irrigation Scheme. Further requests for help came from people in the resettlement area at Elukhanyweni, the village of Keiskammahoek, and each of the 50-odd villages in the Keiskammahoek Magisterial district.

In June 1984, a preschool symposium was arranged. Teachers, mothers, grandmothers, nurses, even some fathers, headmen and the mayor attended -- 68 people in all. Four ladies from the Border Early Learning Centre gave a slide show, screened a film and gave a talk on early childhood education. Questions were asked and answered in English and Xhosa. As a result of this symposium, a teacher-aide course was started, with Early Learning Centre material being used extensively in a rural situation for the first time. The trainees met one afternoon a week for two months and did observation in the mornings.

It was decided to start with ten trainees, but 350 applications were received. An entrance test (of understanding of child care terms, in English) was used. The reason for their interest in the work and the way they dealt with children were also examined (see Appendix A). They also had to do a practical observation for which 35 - 45 of the children in St Matthew's Creche were used. Applicants had to observe a child and answer questions in writing (see Appendix B). About ten applicants were tested every day for a period of two or three weeks. These tests were clearly not perfect. A woman who scored 82% was selected, but was not a successful student. Another, who scored 48%, eventually became co-ordinator for all the Keiskammahoek preschools and is in charge of the practical side of the training.

What started as a hobby had turned into something much bigger. By the end of January 1985 four schools were added to the two existing ones, but by February in the same year there were 15. It was no longer possible to carry on without outside support.

One of the organisations contacted was Mfesane, an ecumenical welfare organisation started by the Dutch Reformed Church. ("Mfesane" is the Xhosa word for the umbilical cord and symbolically expresses feelings of the deepest compassion, care and empathy such as the mother's for her unborn child). In August 1985 it was agreed that Mfesane would investigate the possibility of acting as trustee for the project started by Lorentz and known at that stage as the Educraft and Nutrition Centres. Contact was established between Mfesane and local authorities at Keiskammahoek, such as the Inspector of Education, the Agriculture Official, and the medical doctor, to establish a Community Committee with the view of introducing various community projects, one of which would

be the preschool project, to the community. Contact was also established with government officials, specifically in the Department of Rural Development. This in turn led to a meeting of all interested people and a steering committee was formed on 28 August 1985.

On their first meeting it was suggested that the name of the project, of which the Educraft and Nutrition Centres were a division, be changed to a Xhosa name with a suitable non-paternalistic meaning. The committee suggested the name "Phambili Mawethu", meaning "Let us go forward, our people". It was decided that Mfesane as the trustee would draw up a draft constitution (see Appendix D). The preschool centres would be known as Educare Centres.

Phambili Mawethu followed the example of the Department of Rural Development in working with the Tribal Authorities in all projects in their regions and Headmen and Chiefs in the areas were visited. It was realised that the success of such an undertaking depended largely on their co-operation.

The next step was to introduce the idea to the community at large at a meeting on 3 September 1985. Chief Siwane and Ciskei officials addressed 200 - 300 people in the Keiskammahoek community hall. The steering committee was inducted as Board of Management of Phambili Mawethu. The Board members included a Secretary-Inspector of Education for the circuit, the Chief Agricultural Extension Officer, the Medical Superintendent of S.S. Gida Hospital, the Director of the Department of Youth Affairs, the Director-General of the Department of Rural Development, the Chief Planner of Ciskei, the Keiskammahoek Tribal Authority Representative and representatives of the Trustees (Mfesane). Lorentz was appointed Project Manager.

The aim of the project as stated in the constitution is "the promotion of integrated and multi-functional community development including inter alia supplementary education and training, cultural and social aspects, health and welfare aspects, and agriculture". Community involvement would be the cornerstone. Village Committees would be responsible for co-ordinating all activities. Each community asking for an Educare Centre had to provide the staff, (which ideally should comprise a supervisor with her assistants, a cook and a gardener), a building, kitchen equipment, wood and water, some land for a garden, and money for basic

equipment. Extra voluntary help by mothers to cook the food, collect wood and purify water, had to be guaranteed. Other duties of the committee included supervision of the cultivation of vegetables, the general running of the centre, liaison with the umbrella body, organisation of parent meetings, the formation of work parties to make basic toys from waste, and the construction and repair of the playground.

A second intensive training course was run in October 1985 and a further ten women were selected to undergo training. Extension of this training was carried on by Phambili Mawethu's project co-ordinator, Edith Mhambi, and trainer, Irene Camagu, through one seminar a week at the old St Matthew's hospital buildings. Both attended two intensive training courses at the BELC in March 1985 and August 1985. As a result of this mushrooming and eagerness of communities to obtain Educare Centres, it became impossible to maintain any selection of trainees. Another 50 women started on the weekly course. There were now so many motivated people that three or four intensive two-week courses were run. Some 50 to 60 participated morning, noon and night in preschool matters. In December 1985 most of the previously trained women came in to help with the training. They had been running their own schools and could help with the practical aspects and share ideas about the running of a preschool. Another course was scheduled for April 1986.

Apart from the intensive training courses, in-service training has been carried on on a weekly basis at St Matthew's. Supervisors and assistants come by bus from the widely spread out villages. They are dependent on the bus schedule and sessions cannot start before half past nine. As soon as a new centre is registered, the elected supervisor joins the training sessions. More information of this procedure follows in the factual description of the Educare Centres in the next chapter.

Growth in number of preschools and of children attending was phenomenal. Within two years 40 - 50 centres were started and provided Educare to approximately 3 000 children in the Keiskammahoek District. The Department of Rural Development took responsibility for any centre started outside the initial area of Keiskammahoek - Middledrift.

The growth of Educare Centres in the Keiskammahoek-Middledrift area can be briefly summarised: in 1984 the first two centres were started, by the end of January 1985 there were six, by February 15, by March 1985 there

were 28 and by September 45; by March 1986 there were 62. In the Keiskammahoek District alone the number of centres in February 1986 was 39 (with 2257 children), in June 1986 there were 47 (with 3264 children), and a month later there were 56 centres. (See Appendix C.)

The support that Mfesane obtained from other sources was invaluable. The Creative Employment Action Programme (CEAP) for Ciskei was introduced at more or less the time Mfesane's interest in the Keiskammahoek project began. The CEAP was a project of the South African Government to provide funds for short term work programmes for unemployed people. Application had to be made, with proper motivation, for specific amounts of money, through the approved channels. Mfesane's application, for payment of salaries for supervisors at Educare Centres, was successful. (See Appendix E.) Initially they had worked without salaries, but from September 1986 they were paid R2,50 a day, and, after they were classified as supervisors, they received R4 a day. The Department of Rural Development was responsible for channeling funds through the CEAP. New applications for support from the CEAP have to be made for each new financial year.

Another agent of support was Operation Hunger, which plays a vital role in providing schools with nutritious food free of charge. By June 1986, 66 primary schools in Ciskei (27 552 children) and 117 preschools (7 370 children) were supported. In Keiskammahoek 18 primary schools (6 436 children) and 51 preschools (3 115 children) were on the monthly delivery list (Frasca 1986). The provision for Phambili Mawethu preschools and the delivery of the mealie meal and soup powder was coordinated by Mfesane (see Appendix F). A four-wheel-drive vehicle was purchased to make the deliveries, the cost of which was also partially covered by the CEAP. Further applications for financial aid were made overseas and to the South African Government, but these did not materialise.

Mfesane's philosophy was to involve the community as fully as possible by

- * allowing it to identify its needs;
- * encouraging it to suggest solutions and the methods of implementation;
- * restricting the size of projects so that the community could maintain them largely themselves.

Mfesane itself would provide only those things the community itself could not provide and liaise with the government and other non-governmental organisations.

It was felt at this stage that the Department of Rural Development should become more involved so that Mfesane could eventually terminate its role as Trustee and only stay on as participating member. In other words, the ideal was that the community itself should carry on what was begun by Mfesane, but Government should help to finance it (Rossouw 1986). Eventually a committee consisting of local people and other interested people should then become the body corporate.

Rossouw (1986) claims that the advantages of establishing Educare Centres on the lines of Phambili Mawethu are numerous:

- * children benefit for the rest of their lives from the orientation they gain before they start school;
- * the feeding schemes ensure better physical growth;
- * the communities become involved and take pride in what is happening;
- * women (because many men are migrant workers) learn to accept responsibility for a community project, supporting Crause's (1982 p15) findings that, as a result of male absence, decision-making has become the responsibility of the women);
- * Educare Centres are good starting points for community development as they link two dominant aspects of rural society - women and children;
- * the problem of the young children, (previously sent off to school whose demands they were too immature to meet), is overcome by providing this kind of care situation.

The Minister of Rural Development, Mr W.M. Boqwana (1986 p53) referred to the "Phambili Mawethu" project as Mfesane's show piece which has attracted the attention of all those concerned with community development throughout Southern Africa. The importance of the undertaking lies in the fact that it does not operate at a first world level but is closely connected to the life-style of the rural people of Ciskei. In most cases the "school" is a mud hut and the "teacher" a woman who passed Std 6.

It would seem as if the establishment of Educare Centres as done through Phambili Mawethu, was emerging as a model for rural Ciskei. Less than a year later similar rapid expansion was experienced in the work of the BELC in the Hewu District. As in the Keiskammahoek District, very little provision of preschool facilities existed in the area before this time. A single preschool, started in 1973 by the Department of Education in Sada, is still the only registered preschool. Two Educare Centres were started by the BELC towards the end of 1984. At a seminar offered by BELC in October 1985 in Sada an overwhelming demand for preschools was established and the Teacher Aide Programme was offered over 18 months at Thornhill and Sada. At the start of the project the idea was to set up 12 nutrition clinics, with three preschools attached to each clinic, over a period of three years; they were, however, an established fact within three months. A fieldworker, Mrs Zonke, was appointed to co-ordinate activities. In May 1986, when she met the Director of Rural Development, there were 49 Educare Centres with enrolment varying from 15 to 200 per centre and a total of 1 638 children. These big numbers created problems of accommodation and equipment. It was decided not to accept any child who was not three years old. The younger ones could come for food, but not stay for the activities. It was planned to introduce home industries next to the Educare Centres to keep working parents near their children (Zonke 1986).

The situation is very similar to that in Keiskammahoek, the difference being that there is a full-time BELC senior and assistant fieldworker in Hewu. Training was offered at two points (at Thornhill and Sada), so as to be accessible to more women. The 50 trainees for 1986 were mostly below the age of 30 and only applicants with Std 8 were accepted. Two women are placed at a centre: one attends the weekly training sessions for the whole year and receives a certificate; the next year the second attends training courses (Zonke 1986). When not involved in training, the fieldworkers visit the Educare Centres and attend to parents' problems. The development in Hewu has the great advantage of being better structured and controlled, being an extension of the BELC. A vehicle was put to the disposal of their field worker, who apart from other routine visits, also collects waste from the East London resource room once a month.

In the case of Phambili Mawethu Educare Centres the question arose, however, of how to control and build on this idea. Apart from the Department of Rural Development, good links have been established with officials in the departments of the Planning Directorate, Education, Health and Welfare and Youth Affairs. The Department of Social Welfare, responsible for day-care for babies (from birth to two-and-a-half years old) had no such centres at the time of writing; Phambili Mawethu, however, had four such centres under its care, linked to the Department of Social Welfare.

The Education Department supported the preschool project and agreed in principle to register the Educare Centres, but lacked funds to take full responsibility. Training of teachers was also a major stumbling block: Educare Centres could not be registered with the Education Department because the in-service training the "teachers" undergo, was not fully recognised by the Education Department. A former Director-General of Education, Dan Tom, was at the time an official in the Department of Rural Development. He was very enthusiastic about the idea of preschool centres and suggested that all such institutions be registered and acknowledged as an intermediate stage. The advantage of having them registered would be that they have government approval and that employees could be guaranteed a salary. Eventually they could be upgraded to recognised preschools. Because no substantial outside support could be obtained, however, the plans of the Education Department for a meaningful national preschool programme with a proper training course remain a future ideal.

It was clear that the Department of Education could not at that stage incorporate the development of Educare Centres in its structure. On the other hand, a department such as the Department of Health, would not be able to cater for the important function of education, but would limit its attention to health aspects. When considering Boqwana's explanation of the function of the newly created Department of Rural Development, to "provide a service not provided by any other department, to assist rural communities to make use of their own resources as well as those available from government - in short, to assist communities to help themselves" (Boqwana 1986 p6-7), it is understandable that this department was allocated the control of Educare Centres until the Department of Education could eventually assume responsibility.

The result was that the Department of Rural Development became an important agent of expanding rural preschool activities. [Information on the work done by the Department of Rural Development, was mainly obtained through interviews with officials from the department, namely mr S Nongogo, Director-General, mr HS Melamane, Director and ms HJ Ntutu, Field Worker].

The establishment of this department on 18 November 1985 was a product of the Ciskei Rural Development Programme which was launched on 28 August 1982. President Sebe then quoted a definition for rural development, used by the World Bank, as "a strategy designed to improve the economic and social life of a specific group of people - the rural poor" (Sebe 1982 p7). The strategy would involve the setting up of Village Development Committees which would identify low input self-sustaining community projects to be carried out with the advice and support of Government. These Rural Development Committees fell under the Tribal Rural Development Committee of the specific Tribal Authority. For each district a Rural Development Commissioner, who receives regular monthly reports from the appointed co-ordinators for each tribal authority, has been appointed. Projects under the co-ordinators' care are Educare Centres, community gardens, brick making, health services, home industries, tree planting, and the erection of water tanks and toilets (Zenani 1987). Through a system of well co-ordinated duties, the final authority rests with the Minister for Rural Development. (During the course of 1987 the Departments of Rural Development and of Agriculture and Forestry were combined and placed under the Minister of Agriculture and Forestry, but the responsibilities just described are continued.

The rapid expansion of preschool education in rural areas such as Keiskammahoek and Hewu, served as motivation for the Department of Rural Development to initiate Educare Centres throughout rural Ciskei (Boqwana 1986 pl1). As in the case of Phambili Mawethu, this took place on the basis of community involvement and co-operation with Tribal Authorities. The Department of Rural Development seriously involved itself in preschool work from June 1986. Directives for buildings were laid down: the community had to set aside a site, proclaim it an Educare Centre site, fence it, and make bricks, before Rural Development would provide a plan for a spacious centre with a kitchen. On request, the

concrete floor, doors, windows, roofing and pit toilets would be supplied. This facility was not available for Phambili Mawethu Educare Centres.

The officials concerned with the project agreed in broad terms on the purpose. The Minister of Rural Development summarised the purpose as making available a guided programme of play and learning to lay the basis for more efficient use of formal education. The Director-General envisaged the lowering of the drop-out rate in primary education and the achievement of better results in high schools. Educare experience would prepare the child in a friendly atmosphere for school and for life and teach him good manners (Nongogo 1986). Very similar perceptions were expressed by Rossouw regarding the Phambili Mawethu Educare Centres.

Financially the centres are dependent on the Department of Rural Development. The salaries of supervisors and assistants are also provided on annually approved grants through the CEAP. This means that staff have no guarantee of permanent jobs so there are frequent changes of staff. To supplement the CEAP contributions, parents are expected to contribute R2 a month for equipment and supplementing the diet, but only a few parents can afford this. Operation Hunger provides food when available. With the meagre income, if any, and with no subsidies from Government, the centres struggle to provide the most basic equipment and consequently the standard is low.

ELRU (Cape Town) was identified as the agent for **training**. The officer in charge of the Educare project attended a four week in-service training course (Pre-orientation Programme for Preschool) and a two-week Preschool Education for Teachers Course in Cape Town in August 1986 to qualify her for training supervisors. Ten supervisors attended a course there later. Apart from this training the officer in charge also undergoes regular weekly training at the BELC. An intensive training course for supervisors from 14 - 25 April 1986 was attended by 29 women from all over Ciskei. The fees of most were paid by the Department of Rural Development. In some cases the academic standard of trainees was, however, as low as Std 2.

Preschool teachers from the Education Department were used to help train supervisors in all eight regions of the Ciskei during June 1986 (Ntutu 1987). The supervisors also visited established preschools in the

Zwelitsha district to improve their practical knowledge regarding the running of a preschool.

In effect the expansion of the work was far too rapid and training of staff, on the incidental basis of instruction by the assistant field workers, was inadequate. No formal training was undertaken by the Department of Rural Development. Attendance of courses was sponsored for only a few: ten delegates from Ciskei attended a two-week ELRU-course in Athlone in March 1987. At this same time the BELC representatives, who were asked to look into the matter of training, found that approximately 600 untrained staff were in the field. Because training and equipment were lacking, the care and education rendered did not reach a minimum basic standard (BELC Project Report 1987 pl). It was then decided that BELC would co-ordinate training of the Department of Rural Development educare staff. Three-day orientation courses were planned at Debe Nek in April 1987 which would give 360 students a basic training in running an effective programme. From these the best 50 students would get further training in the Child Care Course at weekly sessions, run for a total of 30 weeks from July 1987 to March 1988. Regular field visits to Educare Centres involved in this in-service training, would be needed to ensure high standards. A sum of R23 850 would be needed for this undertaking.

The policy of the Department of Rural Development was to incorporate existing Educare Centres, and they took over the work in Hewu early in 1986, but BELC activities continued. The Phambili Mawethu Educare Centres in Keiskammahoek were similarly incorporated. The Department of Rural Development Report on Educare Centres for the year ending December 1986 shows a tremendous expansion.

Table 8:3 Enrolment at Educare Centres of the Department of Rural Development

District	Centres	Staff	Children
Mdantsane	30	90	972
Zwelitsha	120	342	6860
Hewu	59	172	3668
Peddie	46	139	2602
Middledrift	67	202	2045
Keiskammahoek	58	169	2586
Alice	51	160	2521
Total	431	1274	21254

In terms of numbers and rate of expansion the preschool developments in Ciskei would seem to be a remarkable success story. There are, however, problem areas. A question that emerges is, whether local communities were ready to be involved to such an extent so quickly. Ntutu (1987) reports that village committees were often not formed or did not function properly, with the result that many of the functions of these committees were not fulfilled. Of the 431 centres, 150 did not have parent-teacher committees and 92 did not have an executive Committee. At only 30 centres the services of gardeners were mentioned. From the report it is evident that motivation by the tribal authorities is important: in one tribal authority ten of the 28 centres had a gardener and in another six of the 14 had one, whereas this service was non-existent in most other tribal authorities. Parent-teacher committees in a specific tribal authority existed in only one of the eleven centres and in another there was none in any of the 18 centres.

It could also be argued that a department like Rural Development was not the best instrument for implementing an undertaking with such strong educational implications. To aggravate the situation, there is a serious lack of fieldworkers to co-ordinate the work in the 500 villages in Ciskei. At the beginning of 1986 there were three BELC fieldworkers in preschool work in Ciskei, of whom only the one in Hewu, worked in a rural area. In the Department of Rural Development, there were ten assistant field workers in five regions: two in Zwelitsha, three in Peddie, one in Keiskammahoek, three in Middeldrift and one in Alice.

It would seem as if the rapidity of growth in Ciskei in general and Keiskammahoek in particular, had a negative effect on standards and that the single most important problem area, is that of training appropriate staff. Placing one professionally qualified preschool teacher in each Educare Centre, would mean an immediate need of 431 such teachers, and should be viewed as long term ideal and unrealistic for the immediate

future. In the meantime it would seem as if use should be made of para-professional staff. This includes finding suitable teachers with an acceptable initial academic level so that training courses can build on a firm foundation. Secondly, it has vast financial implications for a country which already struggles to provide quality primary and secondary education. Thirdly, the selection of appropriate material for training remains an important aspect.

In the description of Educare work in the Keiskammahoek District, which follows in the next chapter, more detailed information will be given about the practical implementation of preschool education in a rural setting.

CHAPTER NINE

A FACTUAL DESCRIPTION OF EDUCARE
IN THE KEISKAMMAHOEK DISTRICT

The Keiskammahoek district was selected for empirical research on the viability of community-based low cost rural preschool education, because this, as was explained in the previous chapter, was the first major attempt at organising preschool education in rural areas in Ciskei on such a scale. The fact that it was expressed as a felt need by the community, which was eager to become personally involved, added to the importance.

The purpose of the investigations, was to look at the children in the Educare Centres, their backgrounds, the backgrounds of the supervisors and the organisation of the centres, and to see if some assessment of the effects, in Sub A on children who had been to Educare Centres, could be made. There are consequently two levels of investigation: firstly, the situation in Educare Centres, and, secondly in Sub A classes. Some of these school pupils had attended Educare Centres and others not. The instrument used to determine the aptitudes of both groups in Sub A, the Aptitude Test for School Beginners, will be described in Chapter 11.

In this chapter, which concentrates on the Educare Centres, the main instrument used to build up a straight-forward account was a questionnaire for supervisors to gain information about themselves and the organisation of their centres (Appendix G). Another approach was to visit Educare Centres personally to experience the practical situation. This in turn led to the drawing up of a supplementary questionnaire (or check list) to get more detailed information about the use of equipment and programme organisation (Appendix H).

Information asked for in the questionnaire, included personal particulars about supervisors (see questions 1 - 12), their training (see questions 14 - 16), descriptions of the Educare Centres (see questions 17 - 21), community involvement (see questions 22 - 25), equipment used and needed in the Educare Centres (see questions 26 - 33), the daily

timetable (see question 34), motivation for becoming a supervisor (see question 35), the value of Educare Centres (see questions 37 - 38), health aspects (see questions 39 - 42), parents' meetings (see question 43) and school entry age (see questions 44 - 45).

Personal visits were undertaken to thirty-four of the forty-seven Educare Centres on the official June 1986 list. (See Figure 9.) As explained, the purpose was to supplement information provided by the supervisors in their responses to the Supervisors' Questionnaire. During these visits observations were made on the type of accommodation, the equipment available, the activities undertaken and the general behaviour and attitude of the children. Where appropriate, accounts of these visits are included. These visits were undertaken mostly in June and November 1986. The very bad condition of most of the "roads" as soon as the "main" road was left, made it a rather adventurous undertaking: big boulders, deep furrows and very rough surfaces actually asked for a four-wheel-drive vehicle and caused the loss of at least one tyre of the researcher's motor car. On the way to a remote and virtually inaccessible Educare Centre, the car was stuck on a big stone; after a considerable time an inhabitant of a nearby village who passed by, rendered his assistance, but it was only after more help arrived that the car was freed. The condition of the roads suggests that many of the villages in which Educare Centres were found, must of necessity be isolated.

On the supplementary check list (Appendix H), supervisors had to indicate the number of specified articles and materials which were in use at their centres, so as to give a more exact picture of the availability of equipment. They also had to indicate the frequency of use of each article and of specific activities.

Contact was first made with the project co-ordinator who introduced the researcher to the supervisors at a training session. The number of centres represented exceeded the number on the official list and questionnaires on supervisors' backgrounds were handed to all the supervisors present. In this way the total population of children attending Educare Centres at the time was included. Fifty-two supervisors responded in July 1986. Not all questions were answered by everyone, therefore the total number of answers does not always equal

Educare Centres and Primary Schools Visited in the Keiskammahoek District

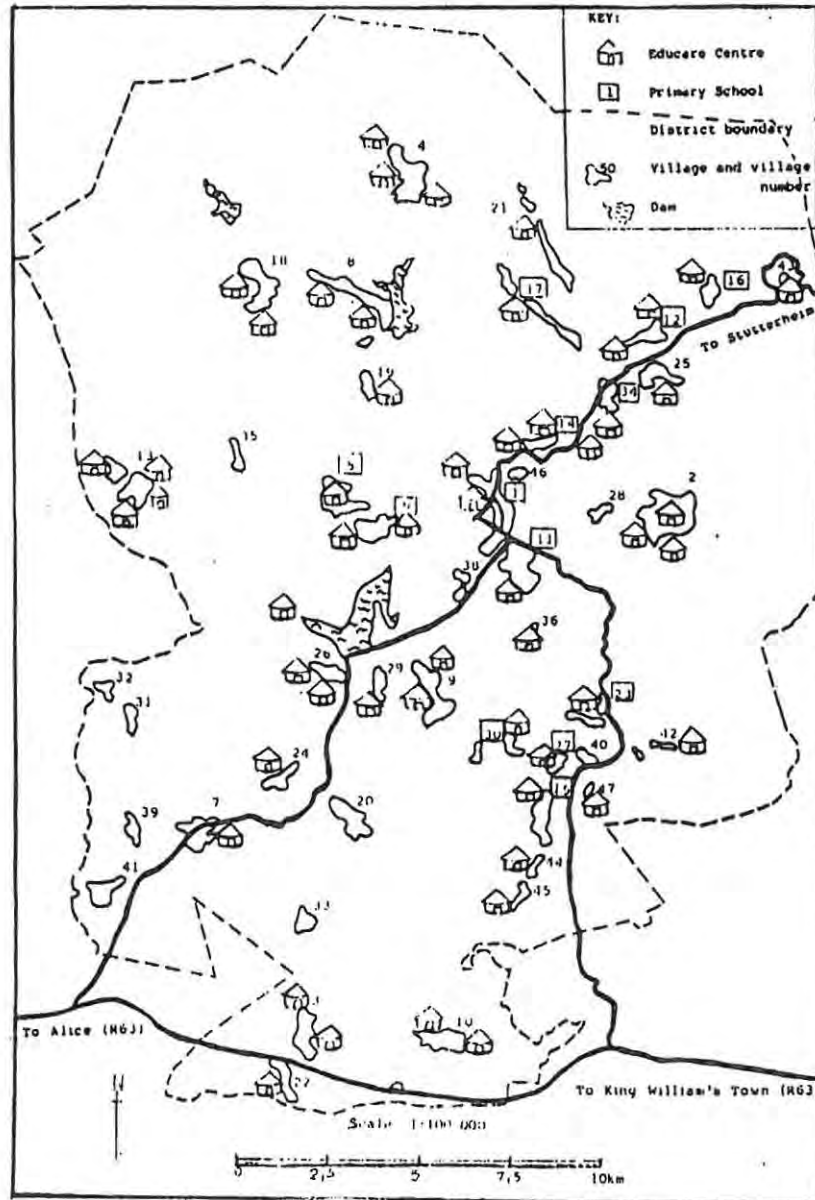


Figure 9

52. This might possibly be linked with language problems. A further limitation is that supervisors did not always give a true reflection of the exact situation; this is exemplified in the section on the use of equipment.

A description of the background of the supervisors will be presented first. An analysis of the answers to question 6 reveals that the average age of supervisors was 37 years. The distribution in age groups is shown in Table 9:1.

Table 9:1 Age Distribution of Supervisors

Age	Number	%
under 20	1	1,9
20-24	8	15,4
25-29	7	13,5
30-34	10	19,2
35-39	9	17,3
40-44	4	7,7
45-49	4	7,7
50-60	5	9,6
over 60	4	7,7
Total	52	100,0

This wide range in age and consequent varied length of time the person could last have had contact with formal instruction, could have had negative implications for the in-service training for Educare work. According to personal observations, however, enthusiasm and dedication to the task do not seem to be connected to age.

The educational level of the respondents (see question 8) is presented in Table 9:2. The difficulty of creating a course for so wide a range of scholastic background has already been referred to and is reflected in this table. It can be seen that a substantial group (40,4%) did not go beyond Standard 6 and only 21,1% went beyond Standard 8.

Table 9:2 Educational Level of Supervisors

Standard	Number	%	Cumulative %
Below std 6	3	5,8	5,8
Std 6	18	34,6	40,4
Std 7	9	17,3	57,7
Std 8	11	21,2	78,9
Std 9	6	11,5	90,4
Std 10	5	9,6	100,0
Total	52	100,0	

It should be remembered that the vast majority of the respondents were at school when the medium of instruction was the mother tongue up to the end of the primary school. For women with primary education only (40%), their knowledge of English would have been confined to a school subject and fluency could not be guaranteed. Their isolated living circumstances would further limit their contact with this language. Training, programme stimulus materials and, indeed the questionnaires themselves, could have given language problems to the respondents. Since the Department of Rural Development has taken over the general running of the Educare Centres, entrance qualifications are set at Std 10 but this ideal has not yet been realised.

Training after leaving school (see question 10) had been available to 14 supervisors. The areas of training are presented in Table 9:3.

Table 9:3 Further Training of Supervisors

Training	Number	%
Teaching	3	5,8
Nursing	3	5,8
Clerical work	8	15,4
No training	38	73,0
Total	52	100,0

This situation, with the majority (73%) having had no further training, again illustrates the problem of setting an appropriate level for training of supervisors. It has already been suggested that lack of familiarity with English, might adversely affect the programmes. In a self-rating response, their knowledge of English and Xhosa (see question 12) was reported, and the results are shown in Table 9:4. Responses should be treated with caution. For example, even though four categories of evaluation were provided, nobody rated herself as having a poor knowledge of English.

Table 9:4 Language Command of Supervisors

Rating	English	%	Xhosa	%
Very good	7	13,5	52	100
Good	27	51,9		
Average	18	34,6		
Poor	0	0,0		
Total	52	100,0	52	100

Some information on the respondents' previous employment was considered important. Previous experience of working with children could improve their efficiency. A long period without employment, together with their isolation, could have limited their intellectual stimulation. The analysis of the answers to question 11 on their previous jobs is provided in Table 9:5. Twenty-six women had been economically active previously.

Table 9:5 Previous Occupations of Supervisors

Employment	Number	%
Unemployed	26	50,0
Domestic servants	15	28,8
Nurses	3	5,8
Teachers	2	3,8
Hotel servants	2	3,8
Factory worker	1	1,9
Shop assistant	1	1,9
Hospital worker	1	1,9
Old age home worker	1	1,9
Total	52	100,0

It can be claimed that their appointment as a supervisor of an Educare Centre has benefited half of the respondents, who previously had no direct income. Just over a quarter of them have had some experience of domestic service, which could have included the care of their employers' children. Nursing and teaching are occupations clearly related to educational work, but only five respondents fell into these categories. In other words, the building upon relevant previous experience, was a possibility for only a handful of supervisors. It is recognised, however, that care of their own children is another important factor. This could partly compensate for the lack of extended formal training and relevant work experience. Only five supervisors do not have children of their own; their average number of children is 3,7 (see question 7). This provides them with ample experience of caring for growing children.

Motivation for the acceptance of the appointment as supervisor (see question 35) is presented in Table 9:6. It must be remembered that this was an open-ended question in the questionnaire and supervisors had the opportunity to express freely their reasons for doing this work. Extended answers were not expected in the light of their relatively low educational level. Although four did not respond, others supplied more than one reason, which brought the total responses to 54.

Table 9:6 Motivation for Applying for Supervisor Post

Reason	Number	%	Clustered %
Love of children	29	53,7	53,7
Wanting to teach	4	7,4	
A job opportunity	3	5,6	
Interest in the kind of work	3	5,6	
Improving own education	1	1,9	20,5
Improvement of community life	7	13,0	
Helping children of the nation	1	1,9	
Helping parents	1	1,9	
Teaching good manners	1	1,9	18,7
Giving knowledge	3	5,6	
Teaching children before they go to school	1	1,9	7,5
Total	54		
No response	4		

It is interesting to note that, in spite of the fact that half of them were unemployed before starting this work, only three saw this as a job opportunity. When the picture of extreme poverty in the area is remembered (see chapter 7), as well as the high percentage of men who are migrant workers, the small numbers who claim economic opportunity as a motivation, is open to question. It can be seen that working with children emerged as the strongest factor; some kind of personal satisfaction was also important for a group; contributing to the general development of community life ranked higher than advancing specific development of imparting knowledge.

Based on observations during visits, it was clear that many of the supervisors and assistants were eager to do well. A pensioned primary school teacher, for instance, is still very active and most enthusiastic in spite of her age. Although the two aspects are not directly related, it is significant that preparing children for school motivated 7,7% of the respondents to become supervisors, whereas 42% rated it as the most important advantage of Educare work (see Table 9:17). It is possible that their training contributed to this shift.

In 50% of the villages the supervisor was well known by most of the children before she took on the job (see question 36). This is likely to have facilitated the start of the programme. In nine villages she was

known to about 50% of the children. In only two she was not known well, possibly because she lived in a nearby village.

Thirty-nine respondents (75%) had undergone in-service training; no training was reported by ten (19,2%); and no response was received from three (5,8%). Exposure to training depended on the time the centre had been in operation. As new centres were started new women joined the training sessions during the course of the year and many would have had to contend with repetition of work already dealt with or would be struggling with gaps in knowledge. Question 14 on how many times they had attended training was frequently answered in terms of the period of time they had been attending. The average time was 10 months, at fortnightly intervals. As was explained in Chapter 8, the training was done by the project co-ordinator and senior trainer, both of whom had obtained BELC certificates. Because the nature of Educare work was entirely new to the vast majority of the respondents, a tremendous responsibility rests on the person responsible for training. The problem of widely differing educational levels and the medium of instruction have already been mentioned.

Theoretical knowledge was sometimes far removed from their everyday needs. For example, English concepts that are used over and over again in the training manuals, do not always relate to trainees' reality. "Educational Toys" are unknown to the population as a whole and not necessarily understood by all supervisors. In one training session, attended by the researcher, mention was made of "Lego", a set of construction blocks, but this was understood as "Leghorn". It may be that not only the unfamiliarity of certain concepts, but the general poor command of English of some of the supervisors, negatively influenced the standard of training. Discussions took place in Xhosa, but were interlaced with basic English terms. In one visit a local girl, who had passed Std 10 but held no job, was dealing with a topic while the co-ordinator was otherwise occupied. In the main she was reading from the English text and then translated and explained the content in Xhosa to those present. They tried to take notes, but because there were no desks they had to balance their books on their laps. On this occasion the researcher tried to help by subsequently duplicating the notes that the co-ordinator had in her file and compiled a full set for each of the supervisors.

The file of the project co-ordinator contained photocopies of lessons or chapters from literature on preschool work on topics such as parent meetings, parent involvement, admission forms, school rules, as well as an observation sheet for teachers observing children. Topics from a guide on Learning Through Play (van der Merwe 1983), included Themes and Tables (interest tables, nature tables and discovery or experimental tables); Educational Toys (construction and concept toys); and sketches of climbing apparatus. A number of activities like Finger Play, Rhymes, Story Time, Songs, Blocks, Music Ring, Flannel Boards and Puppets, Creative Activities, How to make Posters, Planning the Play Room, Sand and the Preschool Child and Making Play Dough were explained. Another topic on Children's Development and Growth was dealt with at a training session attended by the researcher. It is clear that such topics are appropriate for Educare training, but the extent to which they are understood, must, in the circumstances being described, be questioned. Nevertheless, eighty percent were positive that something new was learned at every training session (see question 15). During the researcher's visits to the training sessions the impression gained was that everybody was eager to learn more. The same number of respondents claimed that they learned to make their own equipment (see question 16), but this was not reflected in the visits to many Educare Centres. Further comments on this follow later in this chapter.

Apart from information about the supervisors themselves, the questionnaire was designed to obtain a picture of the accommodation, enrolment, regularity of attendance, equipment of the centres and the programmes followed in them.

Supplying accommodation for Educare Centres is the responsibility of the local community. As will be remembered, this was a condition for starting a centre in the proposal put forward by Mfesane. The buildings used are sometimes provided by local individuals, or churches or schools are used. The headman of the village plays an important role in motivating the community to provide facilities. In a few cases, it was noted during visits that the inhabitants of villages were busy erecting new huts, but in most cases existing buildings were being used as is shown in the responses to question 20, and listed in Table 9:7.

Table 9:7 The Housing of Educare Centres

Type of accommodation	number	%
houses (one- or two-roomed)	19	36
huts	16	31
rooms	7	13
community centres	3	8
churches	2	4
other buildings	2	4
hospital room	1	2
no response	2	4
Total	52	

A "house" is usually built of poles and plastered with mud and consists of only one or two rooms with dung floors. In some cases large pieces of the mud have fallen off the walls. In contrast, a spacious new house, with an asbestos roof, steel windows and mud walls plastered with cement, reinforced with netting wire, was being built in one of the villages. A "church" is a structure similar to a house, but has more space. A "room" may indicate that it is a one-roomed house or in two cases an available classroom at a school was used. A community centre normally is a hut set aside by the community for a specific purpose such as an Educare Centre. Other accommodation includes a brick house that was previously used by the Department of Agriculture and a discarded pre-fabricated two-roomed structure, formerly used by the Department of Works. In assessing the accommodation of those centres visited by the researcher, it can be said that the majority fell between the dilapidated and the spacious new house just described. On the whole, they were reasonably warm and comfortable, but it should be noted that many were too small for the numbers of children they accommodated.

Total enrolment figures, supplied by the 52 respondents, (see question 21) show that numbers in each age group at July 1986 were as set out in Table 9:8 and illustrated in Figure 10 (see page 204). The average enrolment for a centre is 54.

Table 9:8 Total enrolment in 52 Educare Centres

	under 2	2	3	4	5	6	over 6 yrs	Total
Boys :	71	175	338	382	295	125	22	1411
Girls:	77	204	366	345	269	109	25	1395
Total:	148	379	704	727	567	234	47	2806
%	5,3	13,5	25,1	25,9	20,2	8,3	1,7	100

Cumulative frequencies related to these age groups, are presented in Table 9:9.

Table 9:9 Cumulative Frequencies of Ages

Class	f	%	-cum f	-cum f (%)
6+	47	1,7	2806	100,0
6	234	8,3	2759	98,3
5	567	20,2	2525	89,9
4	727	25,9	1958	69,8
3	704	25,1	1231	43,8
2	379	13,5	527	18,8
2-	148	5,3	148	5,3

With almost 70% of children being four years old or younger, little constructive preparation for school skills can take place. Early admission to formal schooling, a feature of Ciskei schools and explored more fully in the subsequent chapter, reduces the number of children over five years. If the younger children could be separated from the older ones, as is normally done in nursery school programmes, appropriate activities for each group could be offered. The fairly large percentage of toddlers (nearly one-in-five) hampers creative activity and limits stimulation opportunities for older children. A supervisor with a toddler on each hip, for instance, (seen on occasion by the researcher) is not in the ideal position to give appropriate attention, assistance or stimulation to the older children. Restricting entry age to three years could possibly alleviate the problem.

Two questions were asked on the growth of numbers (see questions 17 and 18) in Educare Centres from the years 1984 to 1986. Possibly because record keeping was poor, the answers to the questions were so inadequate that a detailed analysis was impossible. From some responses, however, it seemed that where numbers dropped, it was because large numbers had started formal schooling, or a new centre opened in the same area, or parents did not pay for supplementing the food provided and so they removed their children. Increase in numbers was claimed to be due to the food and care the existing children could be seen to be given and that the parents wanted their children to be taught something.

Daily attendance is not regular. On cold and rainy days the children are often kept at home; sometimes they are sent only in time for lunch. On one day the researcher visited eight centres. There was nobody present

at the first one because the supervisor had gone to parliament to listen to the policy speech of a minister. At the second centre, 20 of the possible 40 were present. At the third, only four of the expected 20 children had arrived by 10h30. At the fourth centre, with a roll of 20 children, only the supervisor and assistant were present. The reason given was that it was too cold, although it was a sunny winter day. At the next centre, in contrast, there was 75% attendance. This centre created a very positive impression, with many very useful charts, bought from the supervisor's own pocket, pasted on the walls. On arrival at the next centre, with 68 children on the roll, twelve children were found waiting passively, seated in a row on a bench. The supervisor had been called to an urgent meeting by local authorities. It was not clear whether the children had remained like this for a long time, or whether they had rapidly organised themselves on hearing the car approach. At the next centre the reason given by the supervisor for total absence of the 33 possible attendances, was that there was no feeding scheme for her centre and parents could not pay the requested R2,00 per month. Seven of the possible 30 children were present at the last centre. Although this observation is limited to this one day, attendance would seem to be very erratic.

The problem of **equipping** the Educare Centres has been introduced in the previous chapter and this also seemed to be a major problem in Keiskammahoek. Regardless of the adequacy or inadequacy of training, the lack of equipment is the biggest single factor that restricts activities. Because no outside support was obtained, the amount of one thousand rand per centre of 50 children, budgeted as capital expenditure by Phambili Mawethu, for toys and educational equipment, remained a figure on the books. A detailed investigation of the adequacy of equipment and its relationship to the programmes followed in the centres, is now appropriate.

Supervisors were asked to indicate which equipment they had inside and outside their centres (see question 26). A list of 23 possible examples, against which they ticked their responses, was supplied. They were also asked to specify any other equipment in the centre. It was hoped to establish the extent to which appropriate internationally accepted preschool activities could be provided in the light of programmes described in Chapter 4 and of aspects of school readiness considered in

Chapter 6. A variety of activities to foster gross motor co-ordination could, for instance, emerge where balls, bean bags, tyres and swinging and balancing apparatus were available. Fine motor control activities would be possible where children had the opportunity to draw with crayons, paint, assemble jigsaw puzzles, make clay figures, cut and paste. Visual perception and language and vocabulary-building skills could be learnt by exposure to books and pictures, while educational toys, construction activities and participation in discussions on the nature table could stimulate intellectual development. Playing together with toys, playing in the sand pit or using articles for fantasy play, creates opportunities for co-operation and social skills as well as for emotional development. Many of the possible activities mentioned here would also contribute to establish a task-attitude and such personality qualities as perseverance and an eagerness to experiment and know more.

Supervisors claimed that the following equipment, as set out in Table 9:10, was available.

Table 9:10 Equipment claimed to be present in Educare Centres

Item	number of centres where available	%
Crayons	42	80
Waste	39	75
Magazines	32	62
Balls	28	54
Clay	27	52
Books	25	48
Paint	22	42
Tyres	21	40
Blocks	19	37
Music	17	33
Bean Bags	16	31
Nature table	15	29
Toys (such as model cars)	12	23
Scissors	12	23
Puzzles	7	13
Sand Pit	7	13
Articles for fantasy play	5	10
Glue	5	10
Water Play	5	10
Balancing	5	10
Educational toys	3	6
Rope (for swinging)	2	4

(n = 52)

On receiving the questionnaires back and comparing them with observations made during visits, the researcher realised that the real situation had been obscured. Apparatus was seriously lacking. **Inside equipment** was scarce in all centres. The supervisor might, for instance, indicate that her centre had crayons. In fact, only six short pieces for 50 children might be observed during a visit. Consequently a short check list (Appendix H) was produced to establish exactly how many pieces of a specified article were in fact in use in each centre. The results are later shown in Table 9:11. It became clear that the mere existence of an article did not imply adequacy or guarantee that activity, associated with it, would take place. In spite of the high frequency of magazines, for instance, very few activities were linked to them. A more detailed analysis of the use of equipment, according to the check list, will be presented after considering replies to question 26, as judged in the light of observations during visits to the centres.

The lack of funds sometimes had led to improvisation. Wooden off-cuts were, for instance, obtained by some centres to serve as blocks. The Block Area might, however, contain only four such blocks. Paint which was claimed to be available in 22 centres, must have been used up by the time they were visited, because it was found in only four or five cases. Instead of powder paint, four supervisors bought oxide powder from their own money at the store. Although a variety of colours was not available, oxide powder can serve as a substitute for powder paint. Children's picture books were virtually non-existent. A few old magazines and even school textbooks were placed in a "Book Corner". One supervisor relinquished her two treasured story books, which she had been given as a child by her grandmother, to give the children in her centre the pleasure of looking at the pictures. There were over 100 children on the roll in this centre.

Many examples of incorrect reporting were detected during these visits. Bought toys were very seldomly available at the twelve centres that had indicated that they had such toys. Possibly the term was misunderstood. Seventeen claimed to have "music". Because the question concerned equipment, the researcher assumed they would interpret this as music instruments, but very limited evidence was found of any instruments. Some centres had a few shakers or rattles made of bottle tops strung on a piece of bent wire; one centre had big empty tins with pieces of

rubber tube to cover the openings, but the children did not know how to use them as drums. In only one centre bought instruments such as triangles were seen. Although 15 centres claimed to have nature tables, they were observed in only one. The fantasy/make believe area consisted throughout of empty boxes (eggs, biscuits, milk, washing powder etc) to serve as articles in a shop. In most cases they seemed to be only of ornamental value. Jigsaw-puzzles, although claimed by seven centres, were not in use. It must be conceded that it would be difficult to organise the piecing together of puzzles on the mud or dung floor.

At first sight the information included in Table 9:10 suggested a reasonable provision of certain equipment, for instance crayons, waste material, magazines, balls, and clay were apparently available in more than half of the centres and books and paint could be found in at least two out of five centres. From the description of the visits, however, two problems emerged. The first concerned the quantity of each equipment item available. The second related to the frequency of use of each item. It was therefore decided that a second questionnaire (Appendix H) would be compiled in the form of a check list. These were distributed at one of the training sessions because it proved impossible to organise another separate visit to each of the centres. In this session the supervisors were asked to write down the quantity of each item and the frequency of its use. It was hoped that this would give a more accurate description of the situation in the 52 Educare Centres. Fifty check lists were returned. The total number of children reported on was 2783. The range in enrolment numbers was 20 - 105 for a centre. The average number of children in these fifty centres was 55,7 which is minimally higher than the figure obtained from the first questionnaire. In Table 9:11 the availability of equipment items is analysed. In some cases an indication was made of how often an item was used, without giving the number available. Consequently all figures cannot be accepted as accurate.

Table 9:11 Availability of Equipment in 50 Educare Centres

Materials	No. of Centres Claiming Availability	Range of Items Available	Total No. of Items Available	No. of Child. Centre where Items Avail.	Aver. No. of Items per Child	Average No. of Children per Item where Available	Average No. of Children per Item at all Centres
Crayons	44	2-36	507	2431	0,21	5	5
Shakers	37	1- 6	106	2097	0,05	20	26
Picture books	25	2-16	128	1458	0,09	11	22
Balls	26	1- 6	64	1614	0,04	25	43
Dolls	21	1- 5	48	1257	0,04	26	58
Drawing paper	41			2355			
Drums (tins)	23	1- 4	49	1313	0,04	27	57
Waste Clay (mud)	36			1929			
Bean bags	22			1165			
Toy cars	17	1-12	42	260	0,16	6	66
Scissors	11	2- 5	32	643	0,05	20	87
Blocks	23	1- 5	37	1324	0,03	35	75
Matching cards	15	8-20	204	872	0,23	4	14
Paint & brushes	3	1- 4	8	199	0,04	25	348
Jigsaw puzzles	15	1- 5	64	851	0,07	13	43
	2	1- 2	3	140	0,02	47	928

(n = 50)

The small numbers of certain items can be explained in the light of limited funding. It would seem, however, that possibilities for expansion by improvisation were not always fruitfully explored. Items that might be obtained fairly easily, could possibly include more blocks from the saw mills in the area, drums manufactured from tins and a variety of shakers made from different empty containers. In this way the children could assist in making their percussion instruments.

With an average of fifty-five children in a school the number of meaningful activities that could be developed with an average of two balls or dolls, or two to three picture books, is extremely limited. It is apparent that there is a general scarcity and sometimes a complete lack of the most basic materials, and that the number of items is totally insufficient for the number of children. One way of partly overcoming the problem would be allowing different activities at the same time. For

group games the seemingly small number of, for instance, bean bags, could prove adequate in some centres. The availability of balls in 52% and of bean bags in 34% of the centres, however, might not always guarantee games of throwing and catching, because the incidence dropped as low as two balls for 101 children and two bean bags for 72 children in some instances.

Although the mere existence or absence of equipment is important, the problem can also be looked at in another way. In many cases, several types of equipment need to be combined to provide meaningful activities. An example might be drums and shakers to create percussion accompaniment for songs and nursery rhymes. As has already been suggested, both these can be easily and cheaply improvised. From Table 9:11 it can be seen that 37 centres had shakers, but only 23 of these centres had drums to add interest and to include more children in the activity.

A further example to illustrate the common occurring lack of meaningful combinations of equipment, can be seen from the fact that 41 centres claimed to have some supply of drawing paper, but on average one crayon had to be shared among five children. Such discrepancies in equipment make programmes described in Chapters 4 and 6 impossible to implement.

A few more examples from individual responses are extracted to support the information about the general situation. Picture books are not found in 30% of the centres. In one centre with 58 children there was one book. Another centre with 51 children was better off, with two books, and a third with 104 children, shared six books. The 23 children who have five books are, by comparison, privileged, but the supervisor did not indicate how often they were used. In eighteen centres it was claimed that books were used daily, in eleven once a week and in six twice a week. It cannot be expected that perceptual abilities will improve meaningfully under these circumstances.

The positive impression that is created by the high percentage of 88 centres claiming to have crayons, is questionable in the light of the inadequacy of provision. Seven supervisors were satisfied with the number of crayons they had -- an average of four crayons for 49 children was regarded ample. One supervisor, however, stated that one box of crayons was not enough for her 30 pupils. Paper to draw on was claimed

to be enough by only 28%. It is, therefore, not unexpected that this activity only takes place on weekly or even monthly basis in half of the centres. It would seem that the supervisors' perceptions of adequate equipment had not been sufficiently stimulated during training sessions. The inability to handle writing materials, as was reported by Sub A teachers (see Chapter 11), and as was observed during the testing period, might be related to this inadequate preparation.

Five items on the list were perceived as adequate by the supervisors. Sixteen indicated enough waste material, thirteen enough paper to draw on, seven enough crayons, four enough musical instruments and two enough paint brushes. From the checklist and from specific examples it was, however, clear that no item was adequately provided. These inaccurate perceptions might possibly be explained in the light of the general low standard of living and of supervisors being used to inadequate provision for needs in daily living conditions. This could again have lead to the lack of motivation to improvise more.

The question of supervisors' imaginative construction of alternative equipment, if commercial materials could not be afforded, has already been mentioned. As many as 42 supervisors claimed that they had been taught to make their own equipment during training sessions. Empirical evidence, gained during visits, did not support this claim. Examples of equipment made by the supervisors and assistants, noticed by the researcher, were some kind of weather chart, drawings of different shapes (circle, square and triangle), drawings of animals, cardboard box-"houses", washing pegs with pieces of sponge to paint with and shakers made of bottle tops. In a number of cases pages from Afrikaans school readers or charts with Afrikaans sentences were displayed. The pictures themselves could prove useful.

In answer to question 31, no less than 32 supervisors claimed that they make their own equipment. This included drawings (14), puzzles (6), bean bags (3), matching cards (2) and rattles, dolls, clay animals, drums and blocks (1 each). During observations at the Educare Centres, however, puzzles, bean bags or matching cards were not often noticed.

When examining the numbers and the range of materials that were made from freely available and cheap natural elements, the researcher was struck by their comparative paucity, and, in many cases, the supervisors'

lack of imagination. Responses to question 32 suggested that sticks (34), stones (4) and leaves, seeds and grass (1 each) were collected. Other items mentioned, although not natural elements, were bottle tops (14), torch batteries (5) and tins (1). It would seem as if the training sessions should be used more fruitfully for stimulating and directing the women.

Another problem was that little encouragement seemed to be given to the children themselves to collect and make things. Some supervisors indicated, for instance, that the use of the scissors was limited to themselves. The modification of this approach, too, depends on careful training.

Three important aspects under discussion are availability, adequacy and extent of use of equipment. Some consideration has already been given to the availability and adequacy of materials. From the visits to Educare Centres two levels of use of equipment were distinguished: frequency of use and appropriateness of use. Attention will now be given to this aspect.

Question 27 (Appendix G) asked the supervisors to indicate the frequency of use of materials, giving four levels of answer : every day, once a month, seldom and never. The answers could be summarised as follows : every day use of the articles was reported by 31 (60%), once-a-month by two (4%), and seldom used by 15 (29%). Nobody reported that materials were never used, but four repondents (8%) gave no answer. It was immediately apparent that the answers to this question had to be treated with extreme care. One of the problems was that the phrasing of the question forced a supervisor to give inclusive answers for all materials indicated as available. The follow-up check list (Appendix H), which was compiled to get a more accurate indication of the availability of materials, also investigated the extent to which the articles were used, as well as the frequency of other activities like singing or counting. A summary of the responses is presented in Table 9:12. Frequency of use is arranged in descending frequency of daily use to give an immediate overview of which activities predominate.

Table 9:12 Frequency of Use of Equipment and of Activities

Material & Activities	Range of Items Available	Used Daily	Used Once a week	Used Twice a week	Used Once a month	Never Used
Xhosa songs		48	2	-	-	-
Recitations		48	-	-	-	2
Counting		38	2	8	-	2
Stories told		32	8	5	5	-
Name colours		30	6	9	-	5
Alphabet		28	7	6	2	7
Stories read		26	3	13	4	4
English songs		25	6	5	6	9
Shapes		24	6	12	2	6
Crayons	2-36	23	12	7	4	4
Shakers	1- 6	19	2	4	15	10
Picture books	2-16	18	6	11	-	15
Balls	1- 6	17	5	7	-	21
Dolls	1- 5	16	-	5	-	29
Drawing paper		15	10	11	3	11
Drums (tins)	1- 4	14	2	3	6	25
Waste		13	4	17	9	7
Clay (mud)		10	-	3	5	32
Bean bags	1-12	10	-	4	-	32
Toy cars	2- 5	7	-	4	-	39
Stories illustrated		7	7	4	3	19
Scissors	1- 5	6	6	5	8	25
Blocks	8-20	6	18	-	-	26
Matching cards	1- 4	1	3	3	-	43
Paint & brushes	1- 5	-	4	7	5	34
Jigsaw puzzles	1- 2	-	-	2	-	48

(n = 50)

Discrepancies will be noted in the number of supervisors indicating an activity on their daily programme (see Table 9:15) (to be described later), and the number indicating daily use on the check list. It may be assumed that an item could have been left out inadvertently in the daily programme (an open-ended question) or that the supervisors might list activities simply because this was expected of them as a result of their training sessions.

The four activities best catered for are Xhosa songs (48), recitations (48), counting (38) and stories told (32), whereas the four most neglected and never used are jigsaw puzzles (48), educational toys (43), toys (39) and painting (34). Group activities and chorus reciting dominate the scene; very little scope is left for individual expression.

Activities that foster fine motor control are more or less non-existent. This has implications for the appropriate preparation of the children for formal school and individual activity. Scarcity of pictures and lack of opportunity to draw and paint might be responsible for the inability to reproduce a gestalt or interpret a picture when the child finds himself in a formal school situation. Of the activities that are internationally accepted as a normal part of a preschool programme, only Xhosa songs and stories are used in all centres with some frequency. Important activities like painting, cutting, modelling, building puzzles, playing with blocks, using educational toys, playing with toys like dolls and model cars, bean bags or musical instruments do not take place in at least half of the Educare Centres. On the other hand, the first 13 items in Table 9:12 are included at least once a week in half of the Educare Centres. They include counting, naming colours and letters of the alphabet, as well as informal language development opportunities. The fact that the expected effect of these activities was not reflected in the results of the school testing programme (see Chapter 11), possibly suggests that they were not done effectively.

An attempt was made to classify the different activities in categories denoting different developmental areas. This is presented in Table 9:13 on the next page.

Further comments on the suitability of and frequency of use of equipment and activities follow in connection with the daily programme.

Supervisors were also requested to outline their **daily timetable** to indicate the sequence of activities and the approximate time spent on each activity (see question 34 in Appendix G). An impression of a somewhat mindless repetition of the conventional timetable presented at training sessions was gained. It would further seem that the open-ended nature of the question meant that much detail was not recorded. This was a further encouragement to produce the follow-up check list. The reader is reminded of the comment on discrepancies in numbers in the respective lists and that supervisors could have given positive responses so as to seem to be doing the things expected of them.

Table 9:13 Frequency of Activities Clustered in Developmental Areas

Material & Activities	Range of Items Available	Used Daily	Used Once a week	Used Twice a week	Used Once a month	Never Used
Language development						
Recitations		48	-	-	-	2
Stories told		32	8	5	5	-
Stories read		26	3	13	4	4
Picture books	2-16	18	6	11	-	15
Stories illustrated		7	7	4	3	19
Music						
Xhosa songs		48	2	-	-	-
English songs		25	6	5	6	9
Shakers	1- 6	19	2	4	15	10
Drums (tins)	1- 4	14	2	3	6	25
Instruction						
Counting		38	2	8	-	2
Name colours		30	6	9	-	5
Alphabet		28	7	6	2	7
Shapes		24	6	12	2	6
Art						
Crayons	2-36	23	12	7	4	4
Drawing paper		15	10	11	3	11
Waste		13	4	17	9	7
Clay (mud)		10	-	3	5	32
Scissors	1- 5	6	6	5	8	25
Paint & brushes	1- 5	-	4	7	5	34
Physical activity						
Balls	1- 6	17	5	7	-	21
Bean bags	1-12	10	-	4	-	32
Play						
Dolls	1- 5	16	-	5	-	29
Toy cars	2- 5	7	-	4	-	39
Blocks	5-12	6	18	-	-	26
Matching cards	1- 4	1	3	3	-	43
Jigsaw-puzzles	1- 2	-	-	2	-	48

(n = 50)

The daily programmes reported by the supervisors fit into a common pattern with some individual deviations. The average official time of operation is five hours. At some centres an hour or 30 minutes is allowed for arrival before the start of any activity. The time of departure is in some cases delayed until 14h00.

Table 9:14.1 Broad Outline of Daily Timetable

Time	Activities
8.00	Opening with Scripture and prayers
8.15	Morning discussion/theme
9.00	Free play outside
10.00	Recitations and stories
11.00	Free play inside
11.30	Music
12.00	Lunch
13.00	Cleaning up and closing

Seven supervisors gave examples of programmes without any directed activities, as in the following example.

Table 9:14.2 Timetable without Directed Activities

Time	Activities
8.00	Arrival and breakfast
9.00	Free choice
10.00	Snack
11.00	Play inside and outside
13.00	Lunch and rest
14.00	Dismiss

Another supervisor could only provide four items without any indication of time allocation.

Table 9:14.3 Unstructured Timetable

Time	Activities
	Arrival
	Prayers
	News
	Snacks

Very often the only teacher-directed activity is the telling of a story, singing or recitations for a period of 30 minutes. In contrast to this, some supervisors produced a timetable with many directed activities.

Table 9:14.4 Better Structured Timetable

Time	Activities
8.00	Opening with Scripture and prayers
8.15	Morning discussion
8.30	Theme
8.50	Art
9.30	Snacks
10.00	Free play outside
10.30	Free play inside
11.30	Music
12.00	Story
13.00	Departure

Some interesting individual variations in timetables were found. A supervisor, who is a pensioned Sub A teacher, had items like Mathematics, Xhosa and English Oral, Xhosa and English Recitation, Writing and Health Education on her timetable. At the same time she had very good charts to indicate proportions and relations and the children leaving her preschool for formal schooling might be well prepared. It would seem that the in-service training did not adequately stress an approach for preschool children that was different to that for primary school children. Formal methods used previously by supervisors with primary school experience are sometimes introduced into the preschool programme.

A summary was made of how often an activity was mentioned by individual supervisors. Grouping in categories is attempted in Table 9:15. The items are given as they appeared on the supervisors' time-tables provided in answer to question 34 in Appendix G. As mentioned earlier, more precise information was requested in the follow-up check list and a much better picture regarding preschool activities was obtained in certain areas, especially in language development, music, instructional activities and art. In Table 9:15 the variation in responses from questions in Appendix G and Appendix H is shown.

Table 9:15 Components of Daily Programme

Item	Number of Centres claiming inclusion (Quest.34) Appendix G	Percentage	% of Centres claiming daily inclusion Check List Appendix H
Health and Routine			
lunch	30	58	
breakfast/snack	30	58	
sleep	18	35	
toilet	14	27	
hygiene	3	6	
Total	95		
Play			
free play outside	42	81	
free play inside	23	44	
toys	10	19	
Total	75		
Language development			
recitations	15	29	96
morning discussion	15	29	
stories	15	29	64
theme	10	19	
morning ring	10	19	
news	3	6	
group time	2	4	
Total	70		
Music			
music	26	50	
songs	10	19	96
Total	36		
Devotions			
prayers	19	37	
Bible	14	26	
Total	33		
Instruction			
counting	6	12	76
teach the children	2	4	
English	2	4	
writing	2	4	
reading (alphabet)	2	4	56
language	1	2	
the body	1	2	
Total	16		
Art			
art	3	6	
creative activity	3	6	
paint	1	2	
draw	1	2	combined 46
Total	8		
Physical activity			
games	2	4	
physical training	2	4	
Total	4		

(n = 52)

The first response to the information in Table 9:15 is the much more satisfactory occurrence of some activities from the Appendix H answers than from the analysis of the daily programme in the full questionnaire. In the timetable summary the unlikely impression for black children not to make extensive use of singing, is created. It would seem as if supervisors took this item for granted, because 96% indicated its daily use in the check list. Stories are claimed in only 29% of the programmes in the first columns, but are apparently introduced daily in 64% of the centres, if the Appendix H check list is to be believed. In the same way, the percentages for counting, learning letters of the alphabet and opportunities for creative activities are considerably higher in the check list than in the daily timetables.

When the activities are grouped into categories, health and routine activities rank first with 95 mentions. This is in fact an important aspect because, apart from the purely educative purpose, Educare also implies health care. In some centres a late breakfast or midmorning snack replaced a fuller lunch. In fact, only four centres did not mention food at all, but it is possible that this was omitted by misake, and it is likely that some food was provided in virtually every centre. When the need for rest for very young children is remembered, it would seem unfortunate that some supervisors did not make provision for rest periods. It might, of course, be explained by the expense of providing blankets or mats.

In the Phambili Mawethu Educare Centres the close co-operation of the Department of Rural Development, in association with the Department of Health, is experienced. Their Rural Development programme includes supporting the establishment of village health workers in every village to provide a defence against disease by means of preventative activities (Boqwana 1986 pl9). In reponse to question 39 (Appendix G) supervisors reported that the village health workers visit the Educare Centres regularly and only two respondents reported an absence of such visits. This close co-operation between the Educare Centres and health workers is highly commendable. As many as 45 supervisors, responding to question 40 on the regularity of health workers' visits, indicated daily visits, which would ensure a constant check on the children's health.

Health cards are kept with particulars of every child and inoculations and vaccinations are recorded. The duties of the health worker that are mentioned by respondents (see question 41) include a check on general health and cleanliness (37), taking ill children to the clinic (7), cutting their nails and looking at their ears, eyes and teeth (15) and checking the immunisation cards (1). The health worker also makes door-to-door visits to educate mothers in health matters. Medical checks by a staff nurse are reported in 15 centres, varying from once a week to once a month (see question 42).

In the list of daily activities, the single most important item is free play outside and this reinforces the impression that very little consideration seems to be given to specific ways of stimulating the children. The absence of outside and inside equipment, could make "free play" periods unstimulating. Outdoor activities seem to be totally undirected; there is not really anything "to do" and children seem to wander about. The reader is reminded of the inadequacy of any kind of toys to encourage pupil participation. The impression created at some centres is that the children are kept indoors for the whole day in spite of fine weather. The one centre that has a space allocated to water play, for instance, has it inside. The lack of direction in free play periods (and at times their length) may account for the finding (as shown in Chapter 11), that preschool experience does not seem to contribute greatly to preparation for formal school.

Language development in both Xhosa and English was given prominence with a total of 70 mentions. From observations made in the centres, it was not always obvious that, in English activities, children understood what they were saying. Rote learning, which is also a characteristic of formal education in many black schools, featured in the learning of English rhymes and songs. An English prayer with rather difficult words was used without comprehension in one of the centres. Children were conditioned to respond in a specific way when the key word or name of the recitation was given. It will be shown in Chapter 11 that during the administration of the testing programme in Sub A classes, testees, for instance, responded in a chorus with "Yes, Miss!", when asked if they had put their fingers on a specific picture; in fact half of them had not.

One meaningful activity that was noticed, was learning English words for known objects and connecting them with the known Xhosa word. For

example, the supervisor would point to the window while the children repeated after her, "ifestile...window", or point to parts of the body, saying "umlomo...mouth". At other times they would act out short sentences such as "I am sitting down". Although instruction is in mother tongue in the sub standards, English is introduced as a subject and so some carry-over into formal schooling might occur.

With the wide range in age in any one group, story telling is not easy and it was found that many younger children were not interested or even fell asleep while the story was being told. The story is often the last item on the programme and it is understandable that young children were tired at the end of a long morning. Judging from some examples noticed during visits, the value of discussions on different themes, seemed questionable. The theme of "farming" was presented to one group through an old empty egg box, a milk carton and three flat plastic containers on which meat is sold. When the supervisor indicated this area, she explained, "This is their farm".

In their descriptions of the daily programme, supervisors used different terminology and it was not clear if "music" referred to the use of instruments or to singing. Few instruments, even of a percussion type, were noticed during visits and this has not yet been seen as an important activity by the supervisors. At the only centre where commercially produced triangles and drums were noticed, the supervisor explained that they have not been used that year up to the time of the visit in July. Singing, however, is an important activity in most of the centres and is claimed to be enjoyed by everybody.

The fairly high incidence of morning devotions links with the Christian tradition in the area. A high percentage of parents in the sample, described in Chapter 10, claimed they belonged to Christian churches.

It would seem as if some attempt was made to teach children various academic or cognitive skills. Counting and recognising letters rated fairly highly, when the percentage (76%) of the check list replies, rather than the original timetable summary, is considered. The danger of parrot-learning is, however, very real when the children learn to count. In one instance, children were observed counting torch batteries in a chorus from one to ten, but were unable to say how many batteries there were, when three or four were isolated by the researcher. This is

presumably because they are used to mere repetition without having a concept of the number. Little immediate effect of this aspect of preschool instruction was evident during the practical research in primary schools.

In contrast to the high priority apparently given, for instance, to free play, creative activities seemed to be neglected. On the daily programmes, only 6% of the supervisors indicated that painting and only 2% indicated that drawing was included. On the check list the new percentage for combined creative activities was, however, 46%. The inadequacy of materials, however, limits the number of pupils who could possibly benefit from these activities.

Directed physical activity seems to be almost unused when incidences of as low as 4% are considered. Demonstrations of hopping, skipping and galloping by the researcher at one Educare Centre, were met with glee and had presumably never been done before.

In terms of preparation for formal schooling, the order of importance of the categories would probably be Instruction, Language development, Art, Music and Physical activity, while Health and Play would indirectly contribute to the general development of the child. If these categories, closely related to Sub A demands, had operated well, there should have been better effects. When the results of the tests in the schools are described in Chapter 11, it might be claimed that the insignificant differences between the pupils who had been to Educare Centres and those who had not, suggested that planned experiences in these centres were not effective.

It became evident during visits that the proper execution of a theoretical programme depended on the motivation, enthusiasm, attitude and knowledge of the person in charge. Attitudes ranged from total commitment to laissez-faire approaches. Some centres seem to have become little more than places where the children are left in the presence of an adult and given a meal. This might in itself be a gain, but this is concerned only with the health care aspect of the Educare programme.

Few supervisors seemed to show individuality or creativity. The group feeling and importance of conformity, which is very strong among the

Xhosa, may be an underlying factor. Theoretical knowledge, in many cases seemed not to be put into practice effectively. At the training sessions the different areas (Blocks, Make Believe, Music, Quiet place, Art, Theme, Nature) are stressed over and over again and virtually every centre has something of the kind indicated on pieces of paper stuck on the walls, but in effect the concepts remain at the level of unrelated knowledge. Lack of equipment, lack of space and poor training could be possible reasons. A misunderstanding of the role of the supervisor also contributes to less effective programmes. In a centre where a series of four "weather pictures" was available, the one applicable to weather conditions of the day was supposed to be selected. This was, however, done by the supervisor herself, not by the children. Children do not seem to be challenged with questions. Programmes could display a better balance between directed and free activities. It could be claimed that an activity appeared on the timetable, because it theoretically belonged there, but was not carried out. The timetable displayed on the wall in one centre, for instance, provided for Puzzles, Toys and Music whereas, in actual fact, none of these articles was present.

Outside activities were not catered for properly - sand and water play, for example, were not provided in the majority of centres. It must be remembered that water is a treasured article, and not to be played with. It was also apparent, however, that self-activity was not being encouraged. Glue and scissors, available in a few centres, were used mainly by the supervisor, and old magazines were not used for cutting out pictures. Waste material was not used for construction and creative expression, but was placed in the make believe area. This was understandable as there was frequently no glue to paste things together. It should be noted that supervisors were taught to make their own glue from flour, but the knowledge was seldom put into practice. In two centres, clay and mud figures were displayed, but they had been made by the supervisor herself. In another centre streamers, folded from strips of paper were noticed by the researcher; again it was discovered that the supervisor had made them herself. In a third centre, a peg board with differently coloured pegs, which could be arranged in different patterns, was hung against the wall; the supervisor did not want the children to use it and it remained an ornament. All these limitations would defeat the goals of intellectual stimulation, self-activity, experimentation and other important identified aims, which were discussed in Chapter 2.

From the responses to the Supervisors' Questionnaire (Appendix G) problems of low academic training and inadequate in-service training of supervisors and a lack of equipment or inadequate use of equipment were identified. The open-ended questions (28, 29 and 33) called for identification of the needs of the teachers by themselves. In question 28, supervisors were invited to indicate which of the 22 listed items (not available in their centres) they would most like to have. A few examples of their requests are shown in Table 9:16.

Table 9:16 Needs Expressed by Supervisors

Item	Centres wanting item most urgently	Centres without item
Educational toys	19	47
Scissors	10	40
Jigsaw puzzles	9	45
Balls	9	24
Musical instruments	4	35
Water play	3	45
Sand play	3	43
Paint	3	28
Books	3	25
Swimming pool	3	52

(n = 52)

This table does not give any indication of an awareness of the benefits children can derive from using these items, and may be linked to possible omissions in the training programme. Even though the number of supervisors requesting educational toys is low, it is appropriate that the largest number of supervisors expressed this as the most urgent need. The three who, however, listed a swimming pool as more urgently needed than articles such as books, paint or balls, would seem to show a lack of insight in the specific educational value of such items. Sand play, on the other hand, which can fairly easily be provided for, is not listed by many supervisors. The practical difficulties of a water supply could account for the small number of supervisors who opted for water play facilities. Water often has to be fetched from distant sources and is used sparingly for cooking and washing.

Question 29, which gave supervisors an opportunity to list any other equipment they wanted, produced a wide range of replies. These included dolls (11), toy motor cars (6), tricycles (4), swings (4), a

jungle jim (1) and articles like cellotape (5), drawing pins (2) and paper (2) for use by the supervisor. The first two items would provide opportunities for fantasy play, the next three opportunities for physical development and co-ordination, while the last three items represent a response which was not expected -- basic essentials for administration. The absence of the most fundamental administrative requirements is in itself a reflection of the poverty within the centres and the poverty surrounding the whole Educare movement. Supervisors' visions for the future seem limited and they could not produce challenging ideas when they had to rely on their own originality in answering the question. Perhaps the stark reality of lack of funds restricted their scope.

Question 30, on how supervisors would use the equipment if they were to obtain it, was possibly inappropriately phrased. It was hoped that the supervisors would respond in ways which would show their understanding of the educational advantages of such equipment. Obvious answers such as "glue for sticking and scissors for cutting", were often given. A few answers revealed clearer understanding. One referred to motor co-ordination and the development of large muscles through swinging and balancing; another wrote of "training their minds" through educational toys; a third talked of "muscle skills" and learning shapes by using scissors. Clearly their training sessions had had some influence.

Question 33 was concerned with items other than those used for pupils' activities, but which the supervisors would like to have. Responses included mats (9) and blankets (1), black boards (6), tables (5), chairs (4) and furniture like cupboards or benches (2). Mats and blankets are needed for rest periods; black boards can be seen as educational equipment for children's own cognitive development when they draw on them, as well as being useful for the teacher. Uniforms, required by two supervisors, would save on other clothing. The need for a vegetable garden (2 each), a flower garden and trees (1 each), may possibly be interpreted as an opportunity for natural on-going observation activities for children to see things grow, but this argument should be looked at with caution in the light of supervisors' insights analysed so far. Plates and mugs (one each) constitute support equipment for feeding the children. In fact, the expressed needs reflect very modest requests.

It has been shown that, from the beginning of the Educare Project, the community was expected to be involved. This involvement should include not only making requests for the creation of a centre, but the appointment of a committee to administer it and to provide physical and material assistance. A number of questions in the questionnaire were designed to give a picture of the actual role of the community. Answers to question 13 showed that at the time of answering, the average period that the centres had been in operation was 10 months, with a range from less than 6 months (12 centres), 6-11 months (5 centres), 12-17 months (9 centres) and 18-24 months (6 centres).

From question 5 it was found that apart from the supervisors, there were 86 assistants (some of whom were also responsible for preparing the midday meal), eight cooks and 11 gardeners, all drawn from the local villages, who worked in the centres. Further community support was reflected in answers to question 22 and included financial support (19); providing cooking utensils (18); working in the vegetable garden (10); providing a building (6); and providing mats, wood, water, pinafores and tables (1 centre each).

Most centres seemed to be in the stage of establishing themselves as integral parts of community life. Parent meetings provide the opportunity for discussing problems. In 39 villages (75% of the centres) parents' meetings were regularly held (see question 43). This is a better situation than that occurring in Ciskei as a whole (as was reported in Chapter 8). The two most important items normally discussed were fees and accommodation needs. In a few cases broader educational issues were raised: the role of parents in education, school readiness and health topics were mentioned. This is a positive way of getting parents interested in their preschool children's development. The fact that parents contribute financially, is an incentive for them to attend meetings and to demand certain services. Allowing for the educational levels of the parents, and the poverty in the villages, the extent of community involvement is encouraging.

Question 23 was concerned with the fees paid by the parents. Monthly contributions ranged from nothing, in three cases, to 20c (17 cases), 50c (6 cases), R1,00 (3 cases) and R2,00 in 22 cases. The money was used for food to supplement the meal and soup powder supplied by Operation Hunger in 26 centres. Forty-seven reported that utensils for cooking and washing were bought. Only seven reported that the fee-money was used for equipment for activities, e.g. pencils. Centres that were opened after negotiations with Operation Hunger had been finalised, did not appear on the feeding scheme list and in those cases all money was spent on food. It is to be noted that supervisors spent their own money to buy things such as posters or charts for their Educare Centres. When the level of fees is considered, the serious shortage of educational material can be understood. The answers of the supervisors to the questions about further equipment they would like to have, however, raise doubts about how appropriately further funds would be spent.

Because it was impractical to interview parents, supervisors were asked to suggest the most important reasons the parents had for sending their children to Educare Centres (see question 37). Because the generalisations are rough and because the evidence rests upon the interpretations of the supervisors, and not the parents themselves, the figures should be used with caution.

A simple content analysis of the responses to the open-ended question was attempted under three broad headings: Specific Development, Basic Care and General Development. Responses such as, "children get knowledge", "for experience before child attends school", "to behave like a school child", and "to help the teachers to get easy work", imply an interest in preparation for school, and were placed in the Specific Development category. Basic Care items included such ideas as "it protects them", "they are supported by food" or "take them to the clinic when they are sick". Responses such as "they learn to share" and "they know and love each other", could be regarded as reflecting social development and were placed in the General Development category. Because more than one reason was asked for, the total number of responses exceeds 52, as can be seen in Table 9:17.

Table 9:17 Parents' views on value of Educare

Value	Number	Total	%
Specific development			
acquisition of knowledge	17		
preparation for school	13		
mental development	5		
education	4		
learning English	1		
know the environment	1	41	79
Basic Care aspects			
safety in absence of adults	18		
getting meals	16		
trust in the supervisor	5		
want help from social worker	2		
physical development	2		
cleanliness	1	44	85
General Development (social)			
social development	4		
good behaviour	9		
communication	3		
making friends	4		
learning to share	2		
General Development (emotional)			
emotional development	2		
character improvement	4		
happiness	2		
feeling good about themselves	1		
discipline	1	32	61

(n = 52)

The majority of responses reflects a traditional view of preschool objectives: care and general development. This fairly sophisticated set of values might have been absorbed from the supervisors' training, which stresses support rather than direct preparation for school. It is, however, also true that the Xhosa people are community-directed and social values are of far greater importance than intellectual stimulation. Mothers are especially concerned for the well-being and safety of their children. The two important aspects of Educare work (education and care) are, nevertheless, appropriately balanced in this set of responses.

Supervisors were also asked to indicate what in their opinion was the most important reason, in the list they provided, for parents sending their children to Educare Centres (see question 37). Eight supervisors listed "preparation for school"; six used ideas linked to learning; five

claimed "trust in the supervisor"; four suggested safe keeping and care; two the availability of food; cleanliness, discipline, communication, health and enjoyment were mentioned once each. Twenty-two did not indicate the most important reason. When these reasons were grouped into broader categories, specific development was chosen by 14, and care and general development by 16. The mother substitute role of Educare, which is often regarded as the least important, was identified by the supervisors, as most important for parents. Allowing for limited equipment, funds and training, the most appropriate purpose of Educare might well, in many circumstances, be the care aspect.

Supervisors' own sentiments regarding the most important asset of preschool education were tested in question 38. Responses are again grouped under the same three broad headings as for parents.

Table 9:18 Supervisors' views on value of Educare

Value	Number	Total	%
Specific development			
acquisition of knowledge and intellectual growth	10		
preparation for school	10		
knowledge of own environment	2	22	42
Basic Care aspects			
provision of food	7		
safe keeping	4		
health	2	13	25
General development (social)			
general education	4		
general development	4		
communication	3		
social play	1		
General development (social)			
discipline	3		
kindness	1		
good feelings about self	1	17	33
Total		52	100

The supervisors seem to be more aware of the opportunities for a specific preparation for school than do the parents, who, as has been shown, are perceived as putting heavy emphasis upon basic care. When a comparison is made between the parents' and the supervisors' sentiments, the rank order of the three categories is as follows:

Table 9:19 Comparison between Supervisors' and Parents' views on Value of Educare

	Supervisors	Parents (Supervisors' interpretation)
Specific development	1	2
Basic care	3	1
General development	2	3

Basically supervisors have the right perception of the role of an Educare Centre, especially in a developing country, as an agent for specific development. Possibly some of them cannot put the theoretical knowledge, gained at training sessions, into meaningful practice in the demanding daily routine of caring for large groups of young children of different ages.

The supervisors, in answer to question 45, attempted to detail parents' attitudes to an early start to formal schooling. They suggested that attendance at an Educare Centre was regarded as a waste of time by some parents. To other parents, economic pressures were forcing them to give some education to their children as soon as possible so that they could leave school, start working and so contribute to family income. Some produced unusual suggestions: children should go to school as soon as they are old enough to walk the distance; as soon as they were no longer so dependent upon their mothers; or as soon as they were old enough "to be punished".

As far as the supervisors themselves were concerned, only 14 (27%) were in favour of school entry before six (see question 44). Sixteen (30%) indicated disapproval of school entry before six and 22 (42%) were supporting an entry age of before seven years. Arguments regarding school entry age will be discussed in detail in Chapter 11.

This chapter has covered a very wide number of topics in an attempt to present a general picture of the circumstances in which the Educare work takes place. The general picture is not satisfactory although some positive features emerged. In the examination of the supervisors

themselves, their varied and often low initial levels of education must impose serious limitations on what could be expected of them in the subtle and sophisticated task of dealing with young children. These academic qualifications could also limit what they might be able to absorb in the short duration of their in-service training. The distance to the Border Early learning Centre and public transport difficulties, further discourage them to attend further weekly in-service training in East London.

These limitations could be seen in operation in the assessment of equipment needs, in their inability to improvise and use imagination, and, in many cases, the limited nature of their daily programmes. On the other hand, the group of supervisors showed a potentially valuable age range, the possibilities of useful experience gained from bringing up their own children, and the love for and interest in young children. They were able to express reasonably well, the purposes of the job they were doing, even if they were not able to implement these purposes completely efficiently. Their sustained enthusiasm for their new task, and their willingness to make personal sacrifices to advance the Educare work, must have produced some positive responses in their pupils. What was noticeable (and this must have emerged from their training experiences), was their recognition of the Educare movement's potential to increase children's school readiness. Although their programmes often lacked structured activities, children did seem to learn the rudiments of visual and auditory discrimination and were beginning to form concepts in their own and in a second language.

It must also be recognised that, no matter how excellently prepared supervisors might be, they would face daunting problems in the material circumstances in which they work. The grossly inadequate accommodation, according to western standards, the excessively large enrolment in the centres, the children's irregular attendance, and the wide age range of the pupils who attend the centres, make the application of structured or unstructured programmes described in earlier chapters in this thesis almost impossible to implement. Both types of programmes are dependent upon appropriate apparatus and equipment. The questionnaire's responses have shown how extremely limited these are.

To the difficult working conditions, must be added problems associated with the background of poverty and ignorance from which the pupils come.

Many parents conceive the Educare work as providing a substitute for parental care and a food and health booster. Nevertheless, for parents who are working away from home, the care and safety of their children must be a great comfort and the regular provision of food and the co-operation of the village health workers, must result in stronger and healthier children.

In these general circumstances, the extent to which the community is involved in their Educare Centres' work, is encouraging.

It should be remembered, however, that the assessment of the home background of the Educare pupils briefly mentioned in this chapter, has been the product of the supervisors' own views. In the next chapter, a more detailed picture of the pupils' home background will emerge from the analysis of information collected by the supervisors from a sample of 125 pupils.

CHAPTER TEN

BACKGROUND INFORMATION ABOUT A SAMPLE OF CHILDREN
ATTENDING EDUCARE CENTRES IN THE KEISKAMMAHOEK DISTRICT

In the background to Ciskei and Keiskammahoek given in Chapter 7, information from other general surveys revealed major problems of population density, relatively low educational levels, unemployment, poverty, migrance, deterioration of agricultural production and malnutrition. We now have a chance of seeing the specific background of a sample of children from the area of investigation and how the tendencies of the sample fit in with the picture obtained for Ciskei and Keiskammahoek in a previous chapter.

A questionnaire (Appendix I) was drawn up to collect more background information about a sample of children attending Educare Centres in Keiskammahoek. This questionnaire required personal particulars such as name and date of birth (see questions 1 and 2), information about the parents' presence at home, educational levels, their occupations and an indication of the socio-economic standard (see questions 4 to 12 and 22), the child's position in the family (see questions 13 and 14), parents' church membership, the time of residence in Keiskammahoek, and their financial contributions towards Educare work (see question 16, 17, 18 and 21).

This sample was compiled as follows: in November 1986 the Background Questionnaire (Appendix I) was given to 19 of the supervisors to gain information about 200 of the children attending their Educare Centres. They were to use their class lists and select one out of every three children and then get the required information from the parents. The response was not complete : from 12 centres 140 completed questionnaires were received back. Information from one centre was so incomplete that it was ignored. Only 125 fairly accurately completed forms remained to supply the researcher with information for this chapter. Figures do not always add to the correct total because supervisors either could not get the information from the parents or did

not record it correctly. There are 57 boys and 68 girls included (total 125).

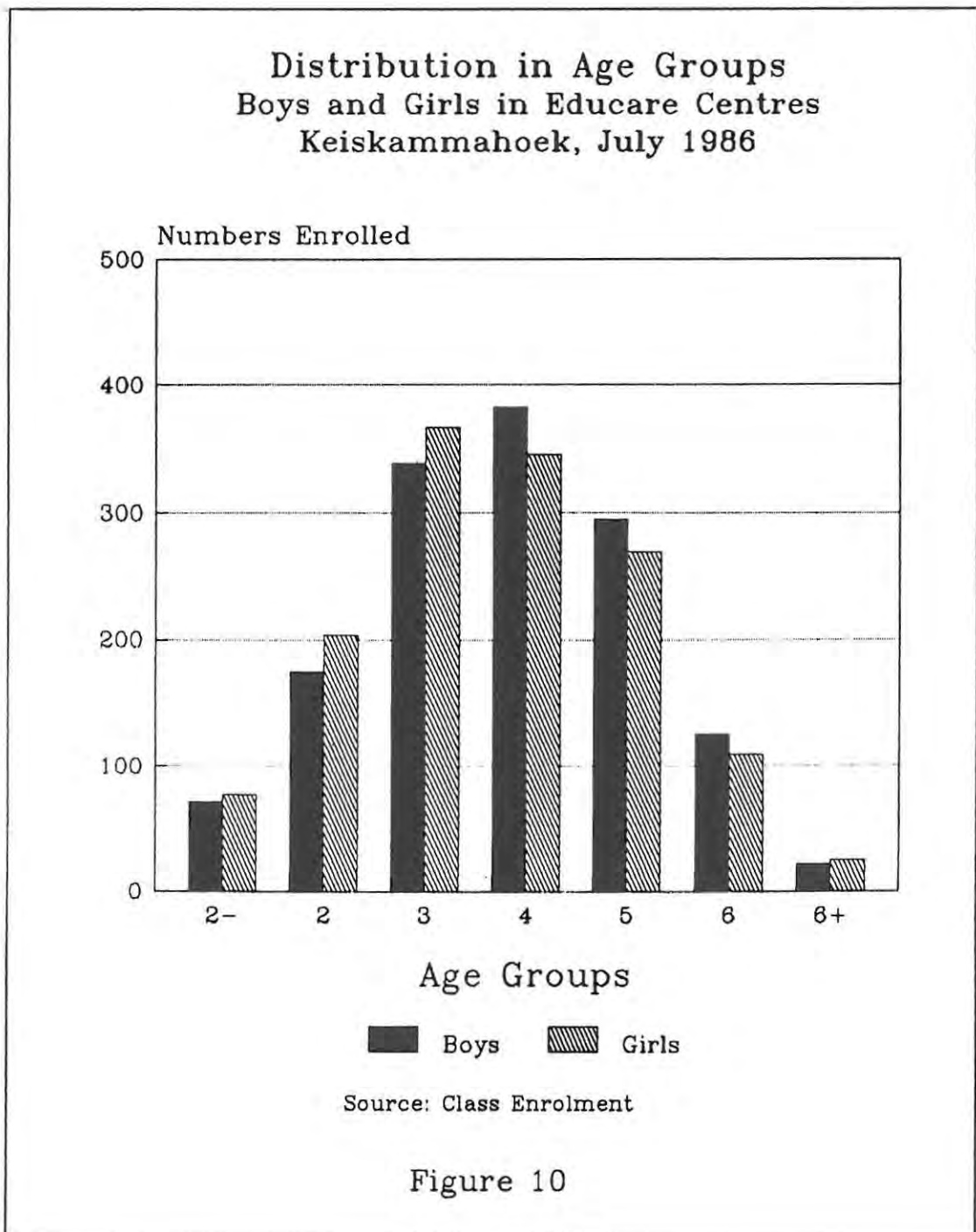
Table 10:1 partly summarises responses to question 2 and shows the age range, from under one year old, to over 7 years old. (See Figure 10.)

Table 10:1 Age Range in Educare Centres

Age range	Number	%
Under 2: 0	2	2%
2:0 - 2: 5	3	2%
2:6 - 2:11	2	2%
3:0 - 3: 5	7	6%
3:6 - 3:11	13	10%
4:0 - 4: 5	12	10%
4:6 - 4:11	27	22%
5:0 - 5: 5	18	14%
5:6 - 5:11	24	19%
6:0 - 6: 5	8	6%
6:6 - 6:11	5	4%
7:0 - 7: 5	3	2%
7:6 & over	1	1%
Total	125	

With a range as wide as this, it is imperative to have at least two separate groups to provide activities suited to the age of the children. In a conventional nursery school with children from three to five-and-a-half years, there are usually three groups with a group to each year. As it is, this whole group functions as a unit and older children have to look after younger ones instead of being stimulated on their own level. The children falling in the under three group (12%) qualify for care rather than educational purposes. About 60% of the sample fall in an appropriate age range of four to five-and-a-half years for Educare work, if general and specific preparation for school is attempted. It might be that the six years and older group (13%) are too mature for conventional Educare work, especially if the quality is rather unstimulating, as was suggested in the previous chapter.

It would seem as if geographical stability of families is well established. Responses to the second part of question two reveal that the place of birth for most children (67%) is the same village where their Educare Centre is; another 18% were born in the Keiskamma district; 9% in Ciskei and 7% in the Republic of South Africa.



Responses to question 20 reveal that 45 children (36%) come to the Educare Centre on their own. Another 45 (36%) are brought by mother/grandmother/relative and 22 (18%) come with friends. No response was received for 10% of the sample. It shows a fair amount of independence amongst the pupils and portrays a feeling of security in going to their Educare Centre.

This fair degree of stability of the community is further reflected in the period of residence of parents in Keiskammahoek (see question 18) with 78% of the families having lived there for more than five years and 46% longer than 20 years, as reflected in Table 10:2. This stability is, however, seriously and negatively affected by the absence of the fathers as reflected later on, in Table 10:5.

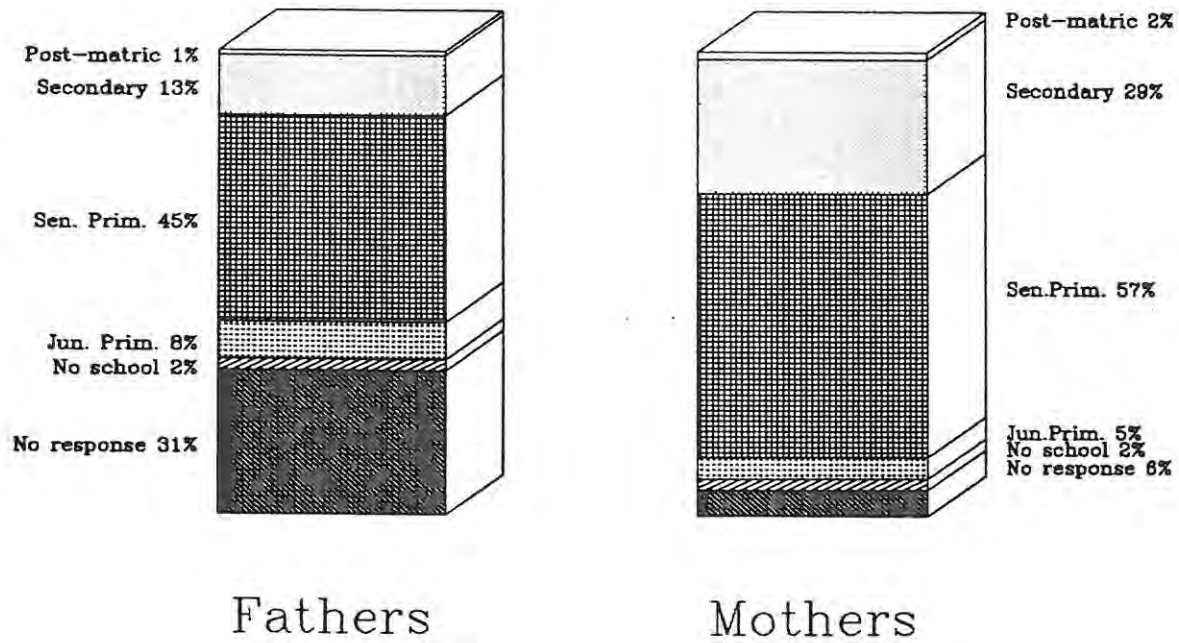
Table 10:2 Years of Residence of Parents in Keiskammahoek District

Years	Number	%
Under 1	2	2%
1 - 2	5	4%
2 - 5	13	10%
5 - 10	27	22%
10 - 20	13	10%
Over 20	58	46%
No Response	7	6%
Total	125	

Another destabilising factor is the phenomenon of resettlement. There was a poor response of 52% to question 19 on resettlement. The number of families indicated as resettled is 31, which is approximately 25% of the total sample. They are more likely to be found in the 16% living there for fewer than five years. Resettlement took place mainly from Humansdorp, Queenstown, Cathcart and Stutterheim.

The educational level of the parents (see questions 7 and 11) is reflected in Figure 11 and appears in tabular form in Table 10:3. According to Unesco four years or fewer of formal education are regarded as inadequate and is likely to result in very low retention of literacy. Of fathers reported on, 12% fall in this category and of mothers reported on, 5%; of the total number in the sample it is 8% for fathers and 5% for mothers.

Educational Situation of Parents of A Sample of Children in Educare Centres Keiskammahoek, July 1986



Source: Questionnaire to Supervisors

Figure 11

Table 10:3 Educational Level of Parents

Educational level	Fathers			Mothers		
	Number	% of all	% of 86 responses	Number	% of all	% of 118 responses
<u>No school</u>	3	2	4	3	2	3
<u>Jun. Primary</u>						
Std 1	4	3	5	2	2	2
Std 2	<u>6</u>	<u>5</u>	<u>7</u>	<u>4</u>	<u>3</u>	<u>3</u>
	10	8	12	6	5	5
<u>Sen. Primary</u>						
Std 3	6	5	7	10	8	8
Std 4	12	10	14	17	14	14
Std 5	16	13	19	24	19	20
Std 6	<u>22</u>	<u>18</u>	<u>26</u>	<u>20</u>	<u>16</u>	<u>17</u>
	56	45	65	71	57	60
<u>Secondary</u>						
Std 7	3	2	4	16	13	14
Std 8	8	6	9	5	4	4
Std 9	0	0	0	8	6	7
Std 10	<u>5</u>	<u>4</u>	<u>6</u>	<u>7</u>	<u>6</u>	<u>6</u>
	16	13	19	36	29	31
<u>Post-matric</u>	1	1	1	2	2	2
<u>No Response</u>	39	31		7	6	
<u>Total</u>	125	100	100	125	100	100

The general standard of parental education is fairly low if compared to what is regarded as adequate today, but is high when compared to their own time when few black people went to school, because the provision of education was very low. By taking into account the ages of the children and their position in the family, we can, roughly speaking, assume that virtually none of the parents in the sample would have been to school a shorter time ago than 20 years; many might have been at school 30 years ago or longer. In these circumstances the figures at Senior Primary level are high when compared with schooling opportunities of 30 years ago. Figures supplied by the South African Institute of Race Relations (1987) for the total number of black pupils in all standards from Sub A to standard 10 in 1945 was only half a million. In 1960 it had risen to one and a half million (compared with the 1986 figure of over six million). In the light of these figures one would expect to find that a large number of parents had not attended school. However, of the

reported cases only 4% of the fathers and 3% of the mothers had had no formal schooling, and a further 12% of the fathers and 5% of the mothers had dropped out of school during the Junior Primary stage. It is impressive that more than 60% of the parents had passed standard six, while 19% of the fathers and 31% of the mothers are reported to have obtained a Senior Certificate. This compares very favourably with the figure of 15% for post-primary education obtained in the Ciskei survey mentioned in Chapter 7.

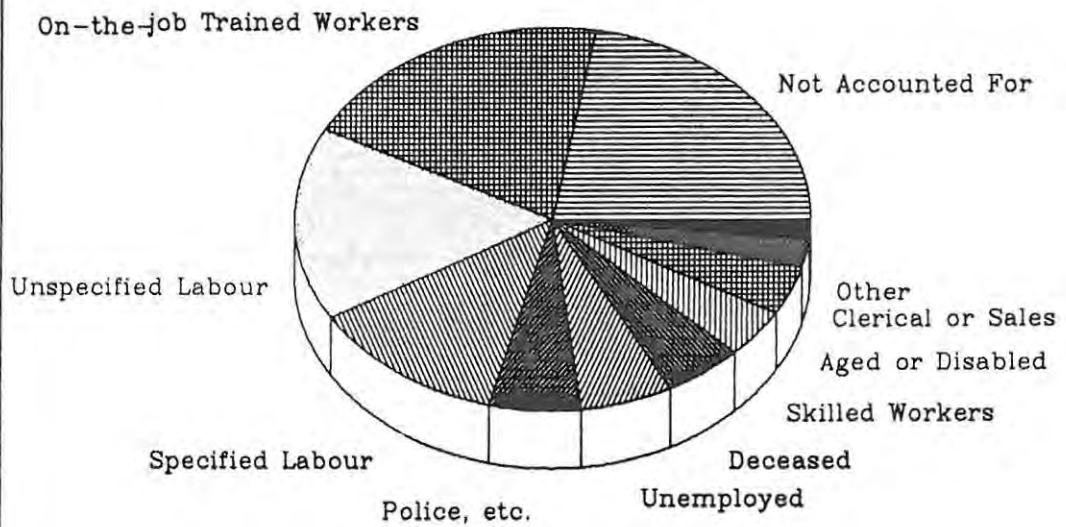
The comparatively high educational level for the parents may be explained in terms of the fact that Keiskammahoek has had a long history of missionary education. The majority of the parents were born in an area with a tradition of, and reasonably adequate provision of, education.

Occupational level is related to educational qualifications. The father's occupation (see question 4) is often used as an indication of the socio-economic status of the family. This question was in 27 cases answered by means of a dash. This might mean that either the father is no longer in contact with the family, or had never been married to the mother. Illegitimacy and desertion are two major sociological problems in Ciskei as a whole (Thomas 1981). Table 10:4 gives information about the fathers' occupations, classified according to the amount of skill or training involved. Income levels are generally low, as in other rural areas in Ciskei.

Table 10:4 Occupations of Fathers of Educare Children

Occupation	No.	%
unspecified labourers	20	16%
specified labourers	15	12%
on-the-job trained workers	24	19%
police, army or traffic control	7	6%
technically skilled workers	5	4%
clerical or sales skills	3	2%
other (minister and herbalist)	2	2%
unemployed	7	6%
aged or disabled	5	4%
deceased	6	5%
not accounted for	27	22%
no response	4	3%
Total	125	

Occupations of Fathers of
A Sample of Children in Educare Centres
Keiskammahoek, July 1986



Source: Questionnaire to Supervisors

Figure 12

Specified untrained labourers include watchmen (7), dairy workers (5), Agriculture Department labourers (2) and one labourer in forestry. The majority of on-the-job trained workers are mine workers (21); the others are factory workers (3). Technically-skilled workers are three drivers, a mechanic and a carpenter. Two clerks and a business man make up the clerical and sales category. Fathers not accounted for (supervisors could not provide any relevant information because contact was apparently lost), unemployed, aged and deceased make up 40%. The unemployment figure of 6% for the whole sample seems low in comparison to 33% for rural Ciskei. There is, however, the unknown factor of fathers not accounted for and for whom no response was obtained, which accounts for 25% of the sample.

Figure 13 refers to the occupations of 113 mothers reported on. As also seen in Table 10:5, women are mostly housewives and so the majority of mothers are not economically active.

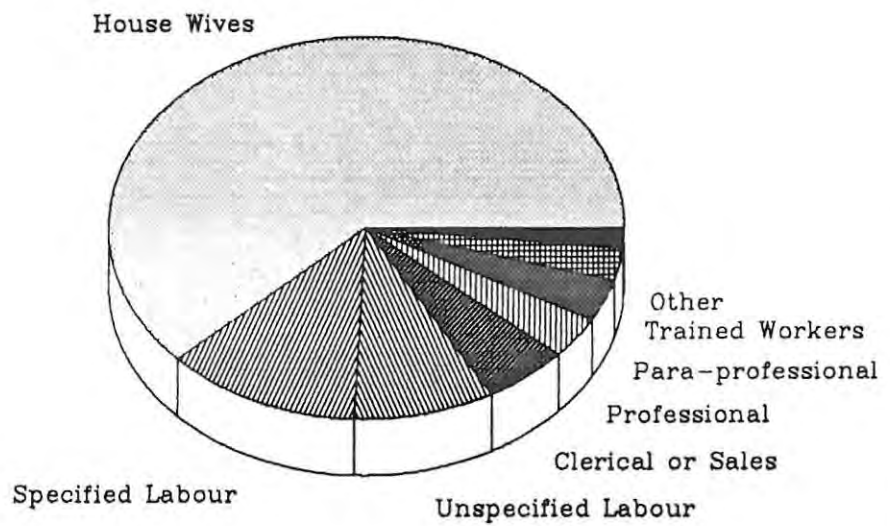
Table 10:5 Occupations of Mothers of Educare Children

Occupation	No.	%
house wives	70	56%
unspecified labourers	10	8%
specified labourers	14	11%
on-the-job trained workers	3	2%
clerical or sales skills	6	5%
para-professional	4	3%
professional (teachers)	4	3%
other	2	2%
no response	12	10%

(n = 125)

Specified labourers include twelve kitchen maids and two Educare gardeners. Three factory workers might have received on-the-job training. Mothers with clerical and sales skills are three clerks, a typing assistant, a shop assistant and a dressmaker. Two Educare supervisors, one Educare assistant and a village health worker are classified as para-professional. A "police worker" and a scholar constitute the two responses under Other. Four percent of the mothers had found employment in Educare Centres. Generally speaking, mothers seem to have attained higher occupational levels than fathers.

Occupations of Mothers of
A Sample of Children in Educare Centres
Keiskammahoek, July 1986



Source: Questionnaire to Supervisors

Figure 13

A specific question on the family income was avoided and income was assessed by goods in the home (see question 22). The **socio-economic standard** is low when compared to western standards and when the demands of a westernised education are kept in mind. Articles found in the home that give a reasonable indication of the socio-economic standards are reflected in Figure 14 and set out in Table 10:6. They include radios (82%), magazines (20%), picture books (15%), home made toys (24%), bought toys (11%) and TV sets (9%). Radios are by far the most frequent capital goods item, but they cater more for adult needs than for children's.

**Table 10:6 Socio-economic Standard as reflected
by Articles Found in the Home**

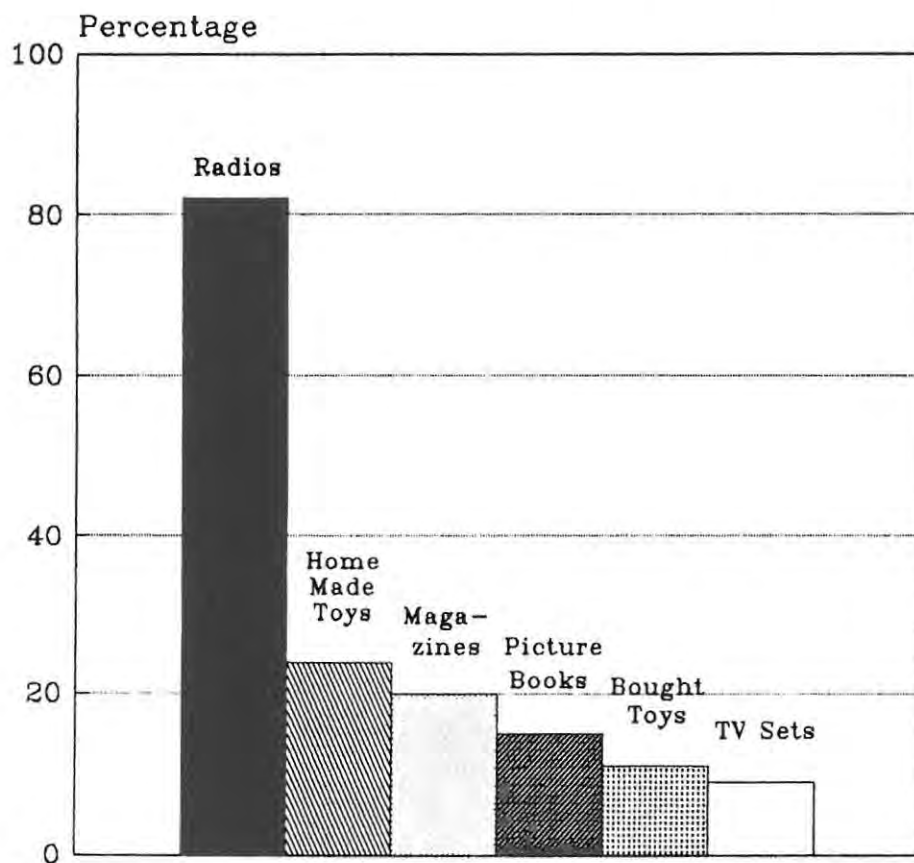
Article	Percentage of Homes
radio	82%
home made toys	24%
magazines	20%
picture books	15%
bought toys	11%
TV sets	9%

The forty percent of fathers who do not support the family financially, as indicated in Table 10:4 above, represent a very large proportion of children, who must consequently be negatively affected. As shown in Chapter 7, poverty can lead to malnutrition and neglect. In the opening chapters, physical deprivation has been shown to lead to retarded development; moreover, disrupted family life was identified as the main cause in a situation of poverty in Keiskammahoek for illnesses like kwashiorkor (Thomas 1981). In these circumstances an intervention programme launched through structured preschool channels may prove to be of invaluable support.

As can be seen in Table 10:5, more than half of the families do not derive any financial gain from work done by mothers and this further restricts opportunities for improving living standards.

In spite of the economic straits in which most families find themselves, monthly fees are paid by 91% of the 112 families reported on, and by 82% of the total sample. Nothing is paid by 8% and they are all from one centre; no response for question 21 was obtained for 10%. Amounts for

Indication of Socio-economic Standard of A Sample of Children in Educare Centres Keiskammahoek, July 1986



Articles Found at Home

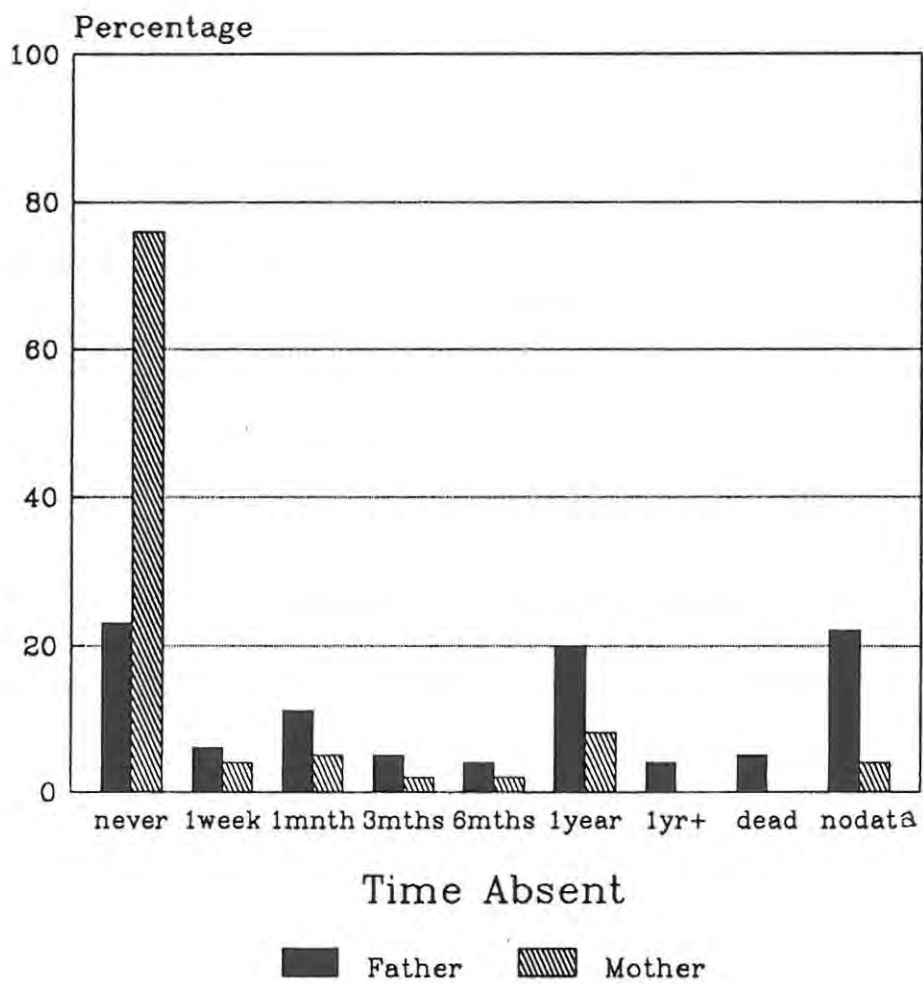
Source: Questionnaire to Supervisors

Figure 14

those that do pay a monthly contribution vary from 20c (18%), 50c (10%) and R1.00 (35%) to R2.00 (23%); for 15% no indication of the amount paid is given. As explained in the previous chapter, the money is seldom used for equipment; the most immediate need in the eyes of the community is food.

Closely linked to parents' occupation, is the fact that jobs are not always available in the close vicinity of the home and this often forces at least the fathers to leave home for varying periods of time. Parental absence from home, is a severe problem in the whole of Ciskei. As was seen in Chapter 7, 40% of working age men are "always absent". The average for the Keiskammahoeck district was given as 21%, with an incidence of 67% in one specific village. Extended periods of absence within the sample is depicted in Figure 15. In only 23% of households is the father living at home (see question 5). The adverse effects of the absent father in urban communities are highlighted by Viljoen's study (1983). Similar studies on rural fathers' absence were not located for comparison, but the absence of the head of the family is always a destabilising factor and disciplinary problems might arise with only female authority. Eighty percent of mothers live with their children (see question 9). This positive aspect is encouraging. It is, however, doubtful if they can provide the early stimulation of the abilities needed by the young child before being admitted to school. When responses to questions 5 and 9 are further analysed, it becomes evident that in 18% of the homes both the father and the mother are away from home for different periods of time. If both the mother and the father work away from home, the child is cared for by relatives, mostly by grandparents (see question 12). The general statement that many young children in Ciskei are cared for by elderly people, is supported by this evidence. Parents working away from home, are absent for those periods of time indicated in Table 10:7. In the case of the fathers there were 33 responses lacking, which correlates with the information reflected in Table 10:4 indicating that 27 fathers are not accounted for and 6 are deceased. Percentages of the total responses are followed by percentages of the 92 families where fathers are reported to be in contact with the family.

Absence from Home of Parents of A Sample of Children in Educare Centres Keiskammahoek, July 1986



Source: Questionnaire to Supervisors

Figure 15

Table 10:7 Extent of Parents' Absence

Extent of Absence	No.	Fathers		Mothers	
		% of all fathers	% of fathers in contact	No.	%
Living with family	29	23%	32%	95	76%
Away for 1 week	7	6%	8%	5	4%
Away for 1 month	14	11%	15%	6	5%
Away for 3 months	6	5%	7%	2	2%
Away for 6 months	5	4%	5%	2	2%
Away for 1 year	26	20%	28%	10	8%
Away for longer	5	4%	5%		
Not accounted for	27	22%			
Deceased	6	5%			
No response				5	4%
Total	125			125	

Of the fathers who live away from the family, 20% are away for a full year, 28% for six months or longer and only 6% are weekly workers who can join their families for weekends.

Questions 13, 14 and 15 dealt with family size, birth order and the number of people who normally sleep in the home. The first two components are represented in Figure 16. Tables 10:8, 10:9 and 10:10 provide percentages to the nearest decimal for these three aspects of family life.

Table 10:8 The total number of children in the family

1	2	3	4	5	6	7	8	9	10	11	12
6	21	13	22	22	15	10	7	4	1	1	1
5%	17%	11%	18%	18%	12%	8%	7%	3%	1%	1%	1%

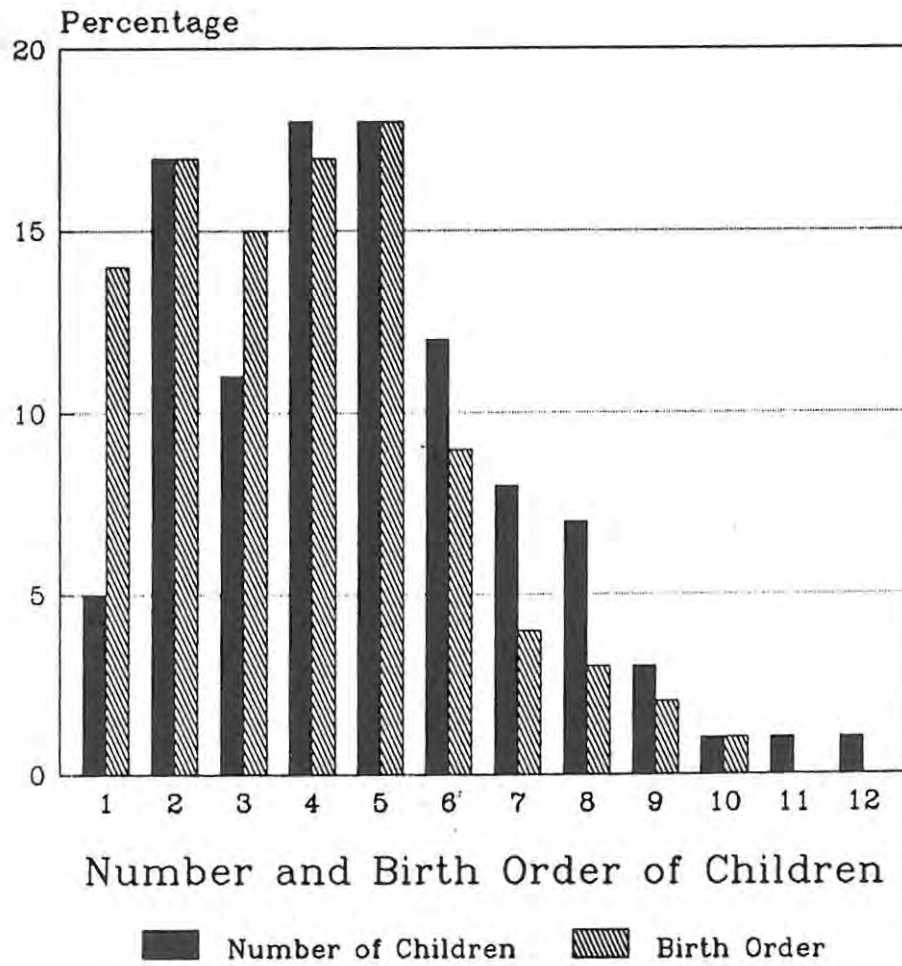
In the case of two families no response was received. There were in total 570 children in the 123 families on whom information was available. This is an average of 4,6 children per family. Another aspect of family size is given by the birth order of the children in the sample. This is shown in Table 10:9.

Table 10:9 The birth order in a sample of Educare Children

1	2	3	4	5	6	7	8	9	10
16	20	17	20	21	10	5	4	2	1
14%	17%	15%	17%	18%	9%	4%	3%	2%	1%

No response was elicited in the case of nine of the 125 families. However, an answer was obtained in 123 instances on the next question.

Family Size and Position of Child in
 A Sample of Children in Educare Centres
 Keiskammahoek, July 1986



Source: Questionnaire to Supervisors

Figure 16

Table 10:10 The number of people who normally sleep in the home every night

1	2	3	4	5	6	7	8	9	10	11	12
0	2	7	6	19	29	25	16	12	3	3	1
0%	2%	6%	5%	15%	24%	20%	13%	10%	2%	2%	1%

This data indicates that the 123 children reported shared their homes with 804 people, at an average of 6,5 occupants per home. As indicated in Table 10:8, the average number of children is 4,6 per family, which implies that the adults average 1,9 per family.

Family size has a certain relation to child stimulation. More than half of these children come from large families (if the normal sociological sense of more than four children is used). In first world countries modern families have an average of only two children. Not only the early intellectual stimulation of the child suffers, but also his health and physical well-being when there are too many children to be cared for properly. Roughly half of the children's position in line of birth order suggests that they might be cared for by older siblings in their preschool years with little adult stimulation.

The density per house is also high with 50% of houses, which are mostly huts or two roomed houses, accommodating seven or more people. The high population density of the houses could limit possibilities for normal creative activity. In these circumstances preschools with structured programmes might be an appropriate solution to these problems.

No attempt was made to measure how the development of the child might have been influenced by the parents' religious denomination (see questions 16 and 17). If parents use their church membership meaningfully, however, this could have some positive influence on the education of their children. Table 10:11 shows the distribution of membership among the various denominations. No response was received, however, in respect of over half (51%) of the parents.

Table 10:11 Church Denomination of Parents in the Sample

Denomination	Fathers		Mothers	
	No.	%	No.	%
Methodist	8	6%	18	14%
Presbyterian	4	3%	8	6%
Baptist	4	3%	5	4%
Zionist	3	2%	6	5%
Moravian	3	2%	3	2%
Anglican	2	2%	3	2%
Watchtower	1	1%	1	1%
African Church	1	1%	1	1%
Reformed Church	1	1%	3	2%
Congregational Church	1	1%	2	2%
Presbyterian Church of Africa	-		2	2%
Roman Catholic	-		1	1%
Free Church of Scotland	-		1	1%
No affiliation	34	27%	6	5%
No response	63	50%	65	52%
Total	125		125	

It is now possible to comment on the extent to which this sample of families represents general tendencies in Ciskei. The questionnaire, however, did not cover all the aspects examined for Ciskei as a whole. Population density, which is much higher in Ciskei than the average for South Africa, can only be expressed in terms of the number of occupants in one home. As was shown, this figure was also high. Educational levels tended to be higher in this sample than in other surveys done in Ciskei. The socio-economic standard, however, seemed to be very similar to other rural areas. The unemployment rate was shown to be much lower and the degree of migrancy slightly better than in the rest of Ciskei. On the whole, it would seem as if this sample represents an above average segment of the rural Ciskeian population.

It is now necessary to turn to the next stage of this practical investigation in this thesis: the comparison between groups of Sub A school children who had and who had not been to Educare Centres.

CHAPTER ELEVEN

PRACTICAL INVESTIGATION DONE IN SUB A CLASSES
IN THE KEISKAMMAHOEK DISTRICT

This investigation was linked to schools since Educare implies both physical/spiritual care and educational aspects, which should prepare the children more effectively for school. It was, therefore, important to know how Educare children had adjusted in school and if they displayed any benefits obtained from their attendance at an Educare Centre.

At the same time as the Educare Centres were visited, and the supervisors' questionnaires were collected, information was obtained through questionnaires sent in September 1986 to 33 schools with Sub A classes in the Mathole Circuit which includes the district of Keiskammahoek (See Appendix J). It was argued that by that time the teachers should have come to know their pupils well and could report on their capabilities. Of special importance was the impression the teacher had gained about the value of Educare programmes in the preschool years for those children who had experienced them.

As a follow-up to this questionnaire, 14 Lower Primary Schools were visited during the third and fourth week of the first school term in 1987. (See Figure 9 on page 165.) Two purposes lay behind these visits. The first was to gain a subjective impression of the general situation in Sub A classes. It is common knowledge that there are large numbers of pupils per class and a lack of proper facilities in some schools. The first impression gained from these visits was that pupils' behaviour was good and they seemed well disciplined. It did seem, however, that the pupils were treated and acted as a whole group too often and little opportunity was given for individual attention and responses. Such teaching methods were understandable in those cases where there were very large numbers of children. It will be shown, however, that large numbers did not occur in every school. Although some pupils appeared bright and lively, there was also subjective evidence of stunted growth and poor body weight.

These visits were also used to collect samples for the objective testing that was planned for the sixth and seventh week of the first term.

This chapter will be largely concerned with the analysis of the questionnaire, completed by primary school teachers and to the results of the ASB tests administered to a sample of the children. A more detailed description of this test will also be included in this chapter.

It has already been shown that some of the supervisors in the Educare Centres might have had some language problems in interpreting the questionnaire. It is suspected that in a few cases similar problems were found in the Sub A questionnaire where specific terminology was used without an extended explanation and it was accepted that teachers would interpret it correctly. Question 8, for example, did not explain what was meant by "noticable differences" between Educare- and non-Educare children in terms of four characteristics (muscle control, motivation and interest, perseverance and concentration, and emotional/social adaptation). Some teachers' failure to understand this phraseology might have affected their answers. Nevertheless, the higher educational level of primary school teachers meant that this questionnaire was in broad terms handled better than the Educare supervisors' questionnaire.

A final response was received from 27 schools. Some schools have more than one Sub A class so that particulars about 35 teachers were available.

The first part of the analysis of the questionnaire concerns the professional qualifications of the teachers in the 1986 survey (see question 3).

According to the South African Institute of Race Relations (1987) 9,4% of African teachers in South Africa have no more than a standard 6 certificate plus a professional qualification, which was usually of three years' duration. The period of training after standard 8 was usually only two years. It is to be expected that the situation will be similar in Ciskei. Four of the respondents who hold a Primary Teacher's Certificate, however, claimed that they had passed the Senior Certificate examination.

When a teacher's own academic background is thin, she could tend to teach rigidly because she might not be clear about the theoretical justifications for her strategies. As far as the lower part of the primary school is concerned, a realisation of the meaning of variation of method is complicated and teachers find it difficult to understand reasons for using alternative methods. Table 11:1 reflects the range of qualifications the 35 respondents hold. It will be noticeable that all the teachers possess certificates and not diplomas as they had completed their training before diplomas were introduced.

Table 11:1 Professional Qualifications of Sub A Teachers in the Keiskammahoe District

Qualification	Entry	Duration	No	%
LPTC (Lower Primary Teachers' Course)	Std 8	3 years	4	11
PTC (Primary Teachers' Course)	Std 8	2 years	18	51
HPTC (Higher Primary Teachers' Course)	Std 8	2 years	8	23
NPL (Native Primary Lower)	Std 6	3 years	5	14
Total			35	

The second point that emerges from this table is that five (14%) of the thirty-five teachers had entered their training after standard 6, but three-quarters had gone as far as the middle of the secondary school and then had two years of teacher training.

An analysis of question 4 was first made to examine the total teaching experience of the sample of teachers. From Table 11:2 it is immediately clear that most teachers had considerable teaching experience, with only one being fewer than four years in the classroom.

Table 11:2 Sub A Teachers' Total Teaching Experience

Experience	Number	%
0- 4 yr:	1	3
5- 9 yr:	11	31
10-14 yr:	3	9
15-19 yr:	7	20
20-29 yr:	4	11
30-39 yr:	3	9
40 years and longer	4	12
No response	2	6
Total	35	

Over 40% of these teachers had been in schools for more than 20 years with one teacher claiming that she has had more than 60 years

experience. Over 60% claimed more than ten years experience. With such a background it could be expected that teachers would be able to recognise significant differences in children's physical and intellectual performances, which might be attributed to Educare experience, even if these judgements had to be made subjectively. The extent of teaching experience should also qualify them to handle their classes confidently.

Specific experience in Sub A was not as great as their total Primary School experience. Table 11:3 shows the teachers' Sub A experience.

Table 11:3 Teachers' Experience in Sub A Classes

Experience	Number	%
0- 4 yr:	14	40
5- 9 yr:	9	26
10-14 yr:	6	17
15-19 yr:	1	3
20-29 yr:	3	9
30-39 yr:	1	3
40 years and longer	1	3
Total	35	

In this case 40% of the teachers had been teaching in Sub A classes for fewer than five years.

Teachers' answers to question 5 were used, in the first instance, to calculate the average size of the classes with which they were working. A problem apparently arose where there was more than one Sub A class in a school. In some cases the answer to question 2 showed that there were two or three teachers at the specific school. The total number of pupils in all Sub A classes for that specific school, was then given in response to question 6. Where only one teacher's name was given for a total of more than 64 pupils, it would seem to be a clear case of having more than one Sub A class, without having given additional teachers' names. In six cases figures ranging from 74 to 95 were regarded as suspicious and taken as two classes. An abnormally low registration figure of 17 pupils in Sub A was found in a High School which seemed to cater for teachers' children in the Junior Primary division. When omitting this figure, the range for the other Sub A classes was from 32 to 64 with an average of 46 pupils in a class. These figures were to be expected when the picture for the country as a whole is kept in mind.

They reinforce the impossible task of providing adequate individual attention. In its understandable absence the preliminary Educare experience of some of the pupils could have helped them adjust to the large class size and to the early formal learning demands of Sub A.

It has already been explained that the official entry age into Ciskei schools is accepted to be six, but that large numbers of children attend before they reach this age. Regulations on entrance age are vague and individual principals seemingly decide on the policy for their school. In some cases the children remain "unregistered" and might spend a full year in Sub A before they are officially entered on the roll. This was confirmed by the answers teachers gave on the age of their pupils and the analysis of the question given in Table 11:4.

Table 11:4 Pupils' Ages in Sub A, Keiskammahoek District

Age	Number	%
5:0	57	3%
5:6	255	14%
6:0	473	26%
6:6	392	21%
7:0	465	25%
7:6 and older	224	12%
Total	1882	

It should be noted that the teachers were asked to supply the ages at the beginning of the year. Seventeen percent of the pupils should not "officially" have been admitted to school. Nearly half the children entered during their sixth year and another 37% had entered at seven years or older. In South Africa as a whole there are still a large number of children entering Sub A considerably older than is educationally sound. In 1986, for instance, more than 150 000 children were 9 years or older as they entered Sub A and of these four and a half thousand were 13 years or older (Carstens et al 1986). In our sample, however, comparatively few children were older than 8 years and this should have eased one aspect of the teaching situation. There were, nevertheless, wide age ranges. The high number of repeaters in some of the classes inflated the higher age groups. In one class the youngest child was four years and one month and the oldest was eight years and eight months.

The question of an appropriate age for starting school will be examined in detail later in this chapter, but the questionnaire gave the teachers the opportunity in question 11 to speak about their reactions. Responses were overwhelmingly in favour of six years or older as can be seen from Table 11:5, and only 18% were in favour of younger entrance age.

Table 11:5 Teachers' Estimates of Appropriate School Entry Age

Suggested Entrance age	Number in favour of	%
5 years	3	9
5 yrs 6 mnths	3	9
6 years	20	57
6 yrs 6 mnths	1	1
7 years	2	6
No response	6	17
Total	35	

Teachers from the same school did not complete separate questionnaires, resulting in a number of no responses. If these are disregarded the number in favour of at least six years or older, increases to 79%.

An assessment of the general problems experienced by school beginners and possible reasons for failure was called for in questions 9 and 12 respectively. Problems of school beginners were identified by the teachers themselves by answering an open-ended question as no categories were given. The responses have been classified into three broad categories. The numbers of teachers suggesting the category are given in brackets.

Emotional and social immaturity was indicated by lack of concentration (12), forgetfulness (1), shyness (5), inability to adjust to the new environment (4), playfulness (3), lack of perseverance (2), selfishness (2), attachment to parents (1) and being afraid (1). (Total 31)

Small muscle control was not well established. Pupils had difficulty in handling writing materials (18), in producing right shapes and sizes (3) and showed ignorance of direction in which to write (1). (Total 22)

General development and language ability were sometimes retarded. The teachers talked of difficulties in speaking properly to the teacher (7),

difficulties in carrying out instructions (4) and in grasping explanations (2). Physical drawbacks mentioned were frequent drowsiness and lack of energy (4) and crying because of hunger (3). (Total 20). Eighteen of the teachers (over 50%) claimed that these problems recurred more frequently among the younger pupils.

The question concerned with reasons for **failure at the end of Sub A** also called for a general statement. Their explanations were grouped under five main headings (see Table 11:6). A total of 51 explanations were given by the 35 teachers.

Table 11:6 Teachers' Views on Reasons for Failure in Sub A

Reasons for Failure	Number
1 General factors	13
underage	
playful attitude	
lack of concentration	
no practise in writing skills	
2 Poor attendance	13
irregular attendance	
coming late	
3 Poor facilities at school	11
lack of books and writing materials	
lack of teaching material	
pupil:teacher ratio	
4 poor home conditions	10
lack of proper parental care	
illiterate parents	
moving of parents by resettlement	
poverty	
5 low intelligence	4
Total	51

For the last item of low intelligence no control or improvement is possible, but many of the other problems can be addressed, some of which through a good preschool programme.

From the questionnaire (question 6) it was possible to calculate how many pupils had attended an Educare Centre before entering Sub A. It was explained in Chapter 8 that rapid growth of the movement occurred in 1985, but a comparatively small number of children who would be entering school in 1986 were enrolled. Only 194 (approximately 10%) had attended an Educare Centre for a full year and a further 86 (3%) had been in a centre for six months or a shorter period. A total of 13% had

had some kind of exposure to organised preschool activities before entering school. In seventeen of the 27 schools that gave information on this question (63%), none of the children had attended an Educare Centre. The situation was very different for the 1987 intake into Primary Schools and it will be shown later in this chapter that there were difficulties in matching children with Educare experience with those that have not had it.

A subjective assessment on the part of the teachers of the school adjustment of those pupils who had attended a preschool programme was called for in question 8. No test was involved. The possible interpretation problems of the question have already been explained. It must also be added that teachers had had no specific training in how to make these judgements and their responses could have been influenced by the questions themselves. Figures should therefore be interpreted with caution. A strongly positive judgement was made by the majority of the teachers in those ten schools (with eleven classes) with Educare pupils about the adjustment of these children to the school situation. Observable differences between pupils are shown in Table 11:7.

Table 11:7 Reported Differences in favour of Educare children

Characteristics reported	Number	%
Small muscle control (handling writing materials)	9	82%
Motivation and interest in their work	10	91%
Perseverance and concentration	10	91%
Emotional/social adjustment	9	82%

Educational progress of children who had had Educare experience ideally should have been greater than those who had not. Suggestions were called for in question 13 to show how preschool education could have helped the child in formal schooling. The suggestions made by the teachers to this open-ended question were classified into six categories. The number of teachers mentioning each item, is given in brackets.

Fine motor control should have been improved through the handling of writing material (16), drawing (8), and using learning aids (2). (Total 26) Language development could be enhanced by specific language and speech development exercises (6), vocabulary extension (4), training in listening to stories (4), expression in mother tongue (3), English recitations (2), memory through rhymes (1). (Total 19)

Elementary number concepts could be developed (4); specifically by counting (2) and by sorting and matching (1) or by preparation for recognising mathematical symbols through visual discrimination training (2). (Total 9)

Character and social development should take place by instilling confidence, teaching unselfishness and perseverance, building a positive self-image and teaching concentration (1 each). (Total 5)

Reading readiness (1) through shapes and colours for discrimination (2), and an introduction to letters of the alphabet (1). (Total 4)

The importance of the child's body could have been stressed by discussing topics such as health (2), good food (2) and parts of the body (2). (Total 6)

One interesting characteristic of these responses is that the teachers had some idea of the purpose and function of a preschool programme, in that they stressed preparation for formal learning rather than formal learning itself, as the advantages that should come from an adequate preschool programme. The level of responses could have been affected by the fact that the number of Educare Centres had been growing rapidly and could have led to many discussions in the district. The sophistication of the level of answers was gratifying and could be built upon in future liaison work between preschool and Primary School workers.

In fact, seventeen (50%) of the Sub A teachers responded positively to question 14 and were in favour of greater liaison so that the preschool work could be specifically linked to Sub A demands (6); so that Sub A teachers could be warned of individual pupils' problems (8); so that Sub A teachers would be aware of what work had been done (2) and sharing of equipment could occur (1).

The questionnaire finally gave teachers the opportunity to make general comments. Twenty-five teachers responded to this invitation - one third (8) talked of the need for improved training for Educare supervisors; five stressed the improvement of apparatus in the centres; two stressed that parents should be encouraged to send children to Educare Centres; the importance of learning through play was mentioned by two and two others suggested that all children should have Educare experience before formal school. The teacher:pupil ratio, feeding schemes, and entrance age to formal schooling were also given thought. The strong

support for the Educare concept is further revealed in these answers. One teacher used the opportunity to stress again the need for liaison between the two kinds of institutions, this time through the possibility of Primary School principals giving advice to supervisors.

It has already been noted that the teachers' responses to the questionnaire were all subjective and they used no quantitative assessment to assist them in coming to their conclusions. The strongly positive attitudes towards the need for and advantages of preschool experience could not alone be used to assess the value of this aspect to education. A more objective assessment was required to see if measurable differences between the performance of those who had experienced preprimary school, and those who had not, existed.

It is now necessary to turn to the tests used in this investigation. The problem of testing young children is universal. A school readiness test should examine all developmental areas and therefore should consist of a comprehensive battery of tests (Nell 1983). Such extensive testing would not be advisable for the young child with limited powers of concentration.

The range of possible test instruments for this specific investigation was limited. From the many available readiness tests, some standardised and others not, only a few are compiled for black pupils and only one or two had been standardised at the time of testing. Individual tests posed a problem. If Educare supervisors were asked to administer it, there would be no standard procedure of application, and individual training was totally impractical. If the researcher was to do it with the help of a Xhosa speaking assistant, it would consume too much time of the assistant who was "borrowed" from the Phambili Mawethu Project.

A description of some of the possible instruments on assessing School Readiness was given in Chapter 6. It was stated there that the Aptitude Test for School Beginners (ASB) (South African Institute for Psychological and Psychometric Research, HSRC 1974), seemed most suitable for this investigation. It has norms specifically for Xhosa speakers and it is a group test. The full battery of eight sub-tests, with at least ten items in each test, would require two days for testing. The erratic attendance of children, particularly in the Lower Primary

School, is well known and a number of cases could have been lost if the full battery had been used. Fortunately the test has a shorter form, which can be administered within a single day, and this too was a factor which led to its selection. The shorter form, according to the compilers, has a correlation coefficient of 0,92 with the total score and satisfactory reliability and validity coefficients were claimed for the Abbreviated Test. The researcher received training from the HSRC in the administration of the full test.

The Test Manual (Coetzee & Swart 1980), explains that it can be used to obtain a differentiated picture of aptitudes of school beginners and so can form the basis for allocation of pupils to homogeneous groups. Indirectly it can be used to assess school readiness, which can be predicted if a pupil scores above average on all the eight tests in the battery (Cronje 1980).

As the instructions are given orally, the success of the test is dependent on the pupils being able to concentrate, understand and carry out such instructions. All tests are preceded by practice examples. Some of these examples, reduced to 71% of the original size, are used in this chapter as illustrations of the sub-tests.

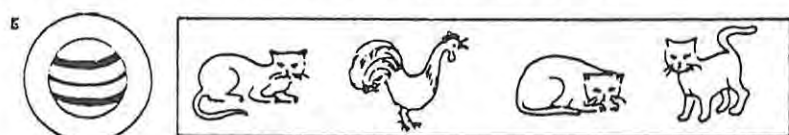
Test 1 is based on **Perception** and the child has to distinguish between similarities and differences, i.e. observe analytically, which is important for learning to read and write.

Test 2 is known as **Spatial** because the child must show the ability to visualise; figures must be rotated mentally.

The abbreviated test consists of the following three sub-tests:

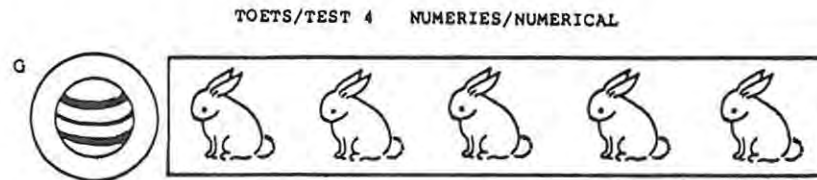
Test 3 is known as **Reasoning**. Concept formation, logical thinking and the ability to classify are measured by correct selection of the inappropriate picture from four examples. For successful learning, this kind of comprehension and logical thinking are important.

EXAMPLE: Draw a line through the animal in the big box that does not go with the other three animals:



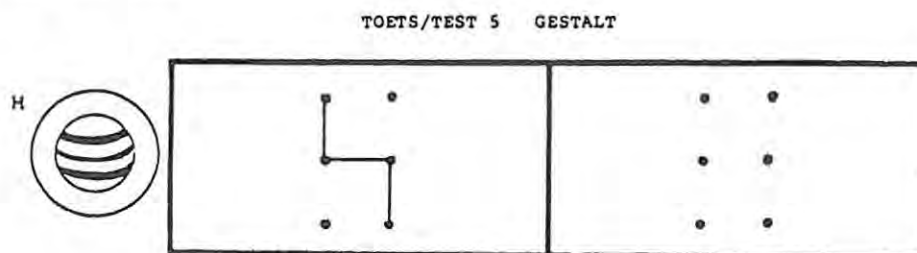
Test 4 is a Numerical test and measures the ability to count and grasp quantities, proportions and numbers. Verbal comprehension, logical thinking and concentration also play a part. These abilities are vital for mastering arithmetic.

EXAMPLE: Draw a line through the first rabbit and a line through the last rabbit:



Test 5 is based on the perception of a Gestalt and tests the ability to reproduce simple figures correctly. A given pattern on a set of dots must be reproduced on an identical set of dots. Attentiveness and concentration are important for this test. The testee must carefully observe the position of lines (horizontal, vertical, oblique or curved) between dots. Success in reading and writing is closely connected with the ability to perceive a gestalt.

EXAMPLE: Draw a picture HERE (show) which looks just like the picture next to the ball:



Test 6 (Co-ordination) measures motor maturity and skill in handling a pencil and paper. The testee must draw a pencil line from left to right between two given lines (0,5 cm apart) without touching the lines or lifting the pencil. The items are clearly based on the Marianne Frostig tests. Fine motor co-ordination has frequently been discussed in earlier chapters of this thesis. It was therefore decided to include this test from the full battery in the practical investigation.

EXAMPLE: Show with your pencil how you would travel from the dot to the star without lifting your pencil or touching the sides of the path:



Scoring of the tests is carefully set out in the manual (p32-36).

Raw scores are converted to a standard five point scale with a mean of 3 and standard deviation of 1. The standard scores are based on the norms for Xhosa-speaking school beginners. Norms have been established for applying the test from the fourth to the sixth week of the school year. The five discrete categories, called staves, are obtained from the Table of Norms in the Manual (p50).

Table 11:8 Table of Norms for Xhosa-speaking School Beginners

Raw Scores for Tests used in this investigation				
Test 3 Reasoning	4 Numerical	5 Gestalt	6 Co-ordination	Stave
10	9-10	95-100	28-30	5
9	7- 8	69- 94	* 22-27	4
6- 8	4- 6	30- 68	14-21	3
3- 5	2- 3	11- 29	3-13	2
0- 2	0- 1	0- 10	0- 2	1

A profile can be drawn to show the testee's achievement in each of the sub-tests.

When the staves of the three tests comprising the abbreviated battery are added it gives a single score to represent the total score of all tests. The total score on the abbreviated battery can also be converted to a standard score ranging from 1 - 5.

Table 11:9 Staves for the Abbreviated Battery of the ASB (Xhosa)

Total score	Stave
14-15	5
11-13	4
8-10	3
5- 7	2
3- 4	1

The compilation and standardization of the test was done with great care. For item analysis and selection, the battery consisting of Tests 1 - 7 was applied in 1972 to a representative sample of 750 Xhosa-speaking school beginners from 10 urban and rural schools.

The establishment of norms was done in 1973 by using a representative sample Xhosa school beginners from rural and urban schools with equal representation of boys and girls. At the same time item selection was done for test 8 on verbal comprehension and norms were established.

Reliability coefficients were established by using the Kuder-Richardson formula 20. These ranged from 0,71 for the number test to 0,92 for the gestalt. These coefficients were claimed by the compilers to be satisfactory. The reliability of the Xhosa Abbreviated test, calculated according to Mosier's formula for composite scores is, 0,89.

Research findings on the validity of the ASB involved comparison of results on the ASB with results obtained at the end of the first year in certain school subjects. Satisfactory coefficients were found. Test 4 (numerical) proved the best predictor of general school achievement (Fraser 1984 p31). The Numerical and Gestalt tests predicted well for arithmetic and verbal comprehension/language. The Gestalt was also significantly correlated with word recognition and spelling achievement of children at risk for learning disabilities (p96).

A validation study carried out by Owen and Swanepoel (1985) in Bophuthatswana indicates the predictive value of the ASB. Those who passed grade 1 performed significantly better on the ASB than those who failed grade 1 (p13). They found that the sub-tests differentiated fairly effectively between successful and unsuccessful pupils although the quality of education and family circumstances also play a role (p15).

Coetzee and Swart (1980 pp41-48) provide standard errors of measurement in terms of raw scores and standard scores. These are given in Table 11:10.

Table 11:10 Standard Errors of Measurement for Abbreviated Test

Test	Raw score Score	Standard Score
Reasoning	1,26	0,52
Numerical	1,28	0,54
Gestalt	8,32	0,28
Co-ordination	2,95	0,45

Expressed in one figure for the abbreviated test it is 0,85 (Total score) and 0,33 (Standard score).

The population from which the sample was extracted was the 1987 Sub A school population of the Keiskammahoek District, which constitutes the major part of the Mathole Circuit. Figures for Sub A's for 1987 were given as 1 430 boys and 1 111 girls with a total of 2 541 in 34 schools (Lupondwana 1987). The pupils to whom the ASB was to be administered, needed to come from groups of children who had been to Educare Centres (the experimental group) and those who had had no previous Educare experience (the control group). These pupils would also need to be matched. Schools were visited during the third and fourth week of the first school term in 1987. Fourteen Lower Primary Schools in the Mathole Circuit were chosen at random and name lists, from the Sub A class lists, for the experimental and control groups of the investigation were compiled. From the admission registers pupils were matched on sex, age and a very simple indicator of home background/socio-economic status, based on the breadwinner's occupation. Erwee (cited in Riordan 1978 pl37) established this as a satisfactory indicator of socio-economic status. These occupations were placed in three very broad categories: unskilled, semi-skilled and professional/administrative. The majority of pupils in all schools came from homes where the breadwinner was an unskilled production or manual worker. Only 9,7% of the breadwinners were classified as professional. Matching was consequently mainly carried out among children of unskilled parents.

Even this apparently simple matching procedure proved difficult. In the first instance, many pupils' entries failed even to provide dates of birth and other children present in the school were not formally registered at

all. Another problem was that in most schools visited nearly all pupils were reported to have been to Educare Centres. Observations in five schools show the kind of problems that were faced.

School 1: Of the 58 pupils, 16 had been attending school the previous year but had not been formally admitted in that year. Previous exposure to Sub A work disqualified them as school beginners. Another nine were attending Sub A in 1987 but were not formally enrolled. Their ages ranged between four and four-and-a-half years. Of the other 30, only three had not attended an Educare Centre.

School 2: Of the fifty names in the register, six were reported not to have attended an Educare Centre, but not one of the six could be matched on sex and age with pupils who had attended Educare Centres (a range of two months was allowed for matching on age).

School 3: Of the 33 children, five were repeaters, and only 15 had dates of birth indicated. Three other pupils had no Educare experience, but their dates of birth were not indicated.

School 4: This small school is not situated in a village. Of the 17 Sub A pupils, seven had not attended an Educare Centre but only one pair could be matched on sex and age. It would not have been practical to conduct the test for only two pupils, so this school was dropped from the experiment.

School 5: Of the fifty pupils in Sub A, 24 were repeaters. Of the remaining 26, only one was reported not to have attended an Educare Centre but she could not be paired in terms of the criteria with an appropriate pupil with Educare experience.

The next problem in matching was the absence of any indication of measurability. IQ scores were not available. Previous research, however, has suggested the unreliability of IQ tests at early ages (Fraser 1984 p44). Keogh and Bekker, cited by Fraser, show that there is a relatively low correlation between IQ's falling in the average range and later scholastic achievement (p43).

Even with the restricted matching criteria finally adopted, it was not always possible to match a pair of children within a single school. This

is possibly the most serious limiting factor within the research, but it proved impossible to avoid. One reason for this, was the impression that had been gained from the Sub A teachers' questionnaire administered the previous year when only 13% of their pupils had attended Educare Centres. By the time the matching procedure started, the picture had changed dramatically.

Ultimately 22 pairs had to come from two different schools. Later in this chapter an account is given of the precautions taken to minimize the uncontrolled variable of the differences between schools. In all a total of 166 pupils were eventually matched using seven of the 14 schools initially visited.

During the selection process a separate group of pupils was identified. Mention has been made of those pupils who had attended Sub A the previous year but were not formally registered, allegedly because they were too young, although this was not always proved to be the case. The test battery was administered to 13 of these pupils from one school. Their test results were used in some analyses to help the reader gain a complete picture of the total situation as it exists in some Sub A classrooms in the research area.

A further sub-group was identified from the experimental group who had been matched originally, but whose opposite number in one of the cross-matched schools was not present on subsequent days of testing. As their results were available, it was decided to use them to give a broader indication of abilities of Sub A pupils (See Appendix L).

All kinds of unexpected problems cropped up when the test was administered. Altogether 43 of the matched pupils were absent on the days the test was administered at the respective schools. It was seldom possible to find substitutes. If one of a pair was absent, there was no purpose in testing the opposite number. Information from the admission registers, used to compile the groups, proved to be inadequate. It was, for instance, only after the administration of the test, that a teacher told the researcher at one school that a tested pupil was a repeater and that another pupil was registered in Sub A for the fifth year. From the same group the teacher labeled two other testees as "dumb" and "a mental case" after the administration of the test. These cases had to be disregarded. At this particular school nine were absent, two were

"mental cases", two were not school beginners and four could not manage to do the test. Of the 33 pupils that were to be tested at this school, the results of only 16 could be used. Problems like these were not restricted to this one school and caused the figure of testees to drop to 114.

Another problem emerged. A small group of pupils (nine from the matched pairs and one from the unmatched group) were unable to score at all on the test battery. They could not understand the instructions or reason logically. Practice examples were explained in detail but even after they were repeated differently and demonstrated meticulously, they could not manage the test. These pupils were removed from the sample and where possible attempts were made to find a replacement opposite number. In five cases this proved possible and at this stage there were 53 matched pairs.

The difficulty of matching across schools has already been mentioned. The possibility existed that different circumstances within schools might partly account for differences in pupil performances. To check this possibility, the results from all the tested pupils in pairs of schools, were compared by means of t-tests to see if significant differences between results from the schools existed. In making this comparison, calculations were first done for the ASB (Abbreviated test) and then for the separately administered Test 6. The results of these tests are reflected in Table 11:11.

Table 11:11 Results of t-tests in cross-matched schools

Schools	ASB			Test 6	
	d.f.	t-value	Significant	t-value	Significant
1 & 2	53	0,484727	No	2,463651	Yes (at 5%)
1 & 3	49	1,276548	No	0,061049	No
1 & 4	50	3,487300	Yes (at 1%)	6,512727	Yes (at 1%)
2 & 4	35	2,929607	Yes (at 1%)	2,559010	Yes (at 5%)
2 & 6	27	0,237559	No	0,201716	No
2 & 7	29	3,446309	Yes (at 1%)	2,115226	Yes (at 5%)
3 & 5	23	0,772769	No	0,783156	No
4 & 6	24	2,346854	Yes (at 5%)	1,787435	No
4 & 7	26	0,801505	No	0,369476	No
5 & 6	16	0,295863	No	1,002205	No
5 & 7	18	3,654999	Yes (at 1%)	3,117691	Yes (at 1%)

Since Coetzee and Swart (1980 p46) show that the Abbreviated ASB correlates highly (0,92) with the results of the whole ASB, it was decided to take only the Abbreviated ASB results into account. From the table it can be seen that five pairs of schools showed significant differences: four of these at the 1% level and one at the 5% level of confidence. It was, therefore, decided to eliminate any pairs of pupils matched across these schools from the final sample. If any cross-matching occurred in pairs of schools where no significant differences were found, these pairs were retained in the sample. It is unlikely that differences in IQ could be solely responsible for the observed differences because a normal distribution of IQ is expected in all schools alike. Children are not sent to preferential schools; attendance of any particular school is purely in geographical terms. Furthermore, the home background of the pupils tested is very similar and it is unlikely that major differences in measured intelligence will be found in different school intakes. So the observed differences are likely to emerge from differences in schools. This could be attributed to factors such as the teacher's experience, teacher efficiency or physical features of the learning situation, including facilities available.

In these circumstances 12 of the 53 pairs were eliminated and the final sample consisted of 41 matched pairs. The results of the unmatched pupils and the pupils who were in their second year of Sub A, but who were not registered the previous year, as well as the results of the pupils unsuccessfully cross-matched, were included in a comprehensive sample of all tested Sub A's.

Having obtained the approval of the Ciskei Department of Education, the test was administered during the sixth and seventh week of the first school term in 1987, following the recommendations about timing in the test manual. A Xhosa-speaking woman (a project co-ordinator for Educare Centres in Keiskammahoek), was trained by the researcher to administer the test, following the wording of the Xhosa manual of which she had her own copy. The researcher was at all times present, but kept a low profile to eliminate the influence of a "foreign" element.

Separate and reasonably quiet places for testing were found with difficulty because of serious lack of classroom space. Often classes

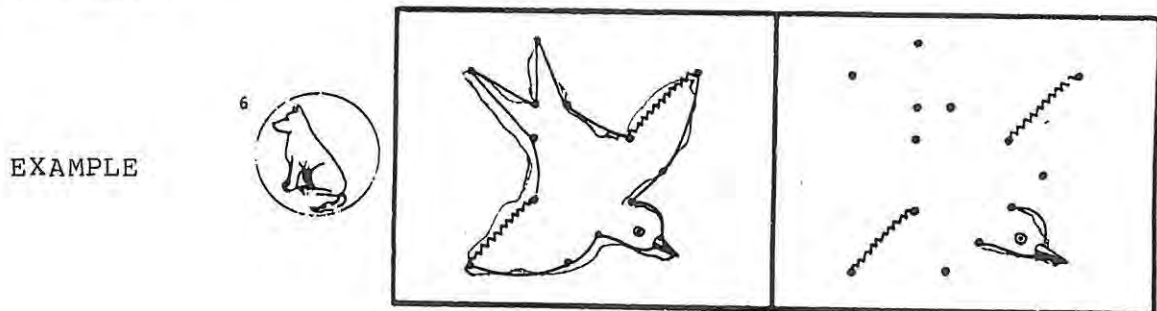
were moved, on occasion sometimes out of doors. In one school the researcher watched the teacher keeping the other children quiet, by allowing them to draw in the dust, while the test was administered in the Sub A classroom. On another occasion a considerable break occurred between the administration of two sub-tests, when the pupils had to be moved from the church hall (which serves as classroom) because it was time for the women's prayer meeting. To make room for the testees, another class had to vacate the rondavel they were using and continue their class under a tree.

The researcher made subjective observations of the pupils' behaviour during the administration of the test. The physical appearance of some of the pupils in Sub A seemed to indicate that they were underweight as they were very small and thin. The "Phillipine test" was carried out on a random group of 126 pupils; of these, 40 (32%) could not carry out the expected action to touch the lobe of the left ear when extending the right arm over the head. If this action can be performed, it is claimed to be indicative of children reaching the bodily proportions of a school child.

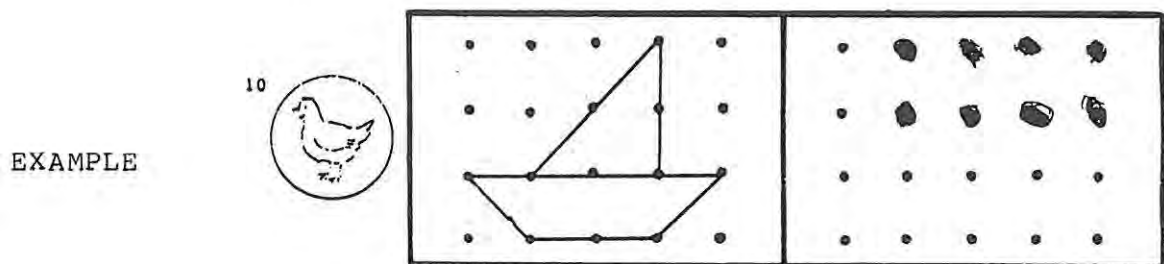
Their posture in the school desk was not always satisfactory; some testees did not sit properly, but almost crawled onto the desk. The manner in which writing material was handled and the pencils were gripped, showed the need of remediation. A few cases were noted of pupils who formed a fist to hold the pencil; some clutched it too tightly and others held it too loosely. The position of the test book in a number of cases revealed lack of experience in writing: pupils rotated the book, especially during the Gestalt test.

There seemed to be a wide range of perception difficulties. In each item of the test a preliminary identifying drawing is given, which the children are supposed to touch so that a quick check can be made that they are working on the correct item. These drawings represent things such as a ball, fish, flower, tree or doll. In many cases the children had difficulty in identifying these. When the tester asked if everybody had his finger on a particular picture, a chorus of "Yes, Miss" would sometimes meet her, whereas a number had, in fact, their fingers on wrong pictures. It was interesting to note that their response was in English, whereas the question was asked in Xhosa. The tendency to agree in chorus speaking was noticed very often.

There was even difficulty in helping the testees to get the practice examples right. In the Gestalt test, pupils had to be shown continuously (often without success) where they were to reproduce the given structure. More help was in fact given than was prescribed in the published instructions, but the researcher was of opinion that, in this test, the formation of a gestalt was more important than verbal comprehension. The following example clearly shows that the pupil did not understand the instruction. He traced the existing lines in the left box instead of reproducing the gestalt in the right box. Even when he was shown again exactly what to do, he was unable to complete the exercise.



In the following example, the complete inability to reproduce the drawing is obvious.



This problem seemed sufficiently serious to justify a short separate investigation. A few days after the test was applied, 27 testees at two schools were asked to identify each of the pictures used in Test 3 and Test 4 and note was taken of those that could not answer at all and of the range of incorrect responses given. Care was taken not to make too rigid demands on the pupils' identification skills, for instance, the identification of the ballerina was accepted as correct if the pupil said a person or lady or human being. The responses are shown in Table 11:12.

Table 11:12 Oral Identification by some Sub A Pupils of
Test Items: Test 3 and 4

Item	Picture	Correct answer given	No answer given	Wrong answer given	Examples of wrong answers
Test 3					
E	cat 1	20	4	3	mouse, rabbit, dog
	cat 2	24	3		
	cat 3	21	6		
F	tree	26	1		
	bird	16	6	5	fish, butterfly, duck, chicken(2)
	butterfly	18	9		
	rabbit	16	5	6	cat(5), dog
	bee	10	15	2	butterfly, bird
1	flower	6	4	17	tree(17)
2	key	26		1	tap
4	fish	15	10	2	bird, dove
	aeroplane	23	2	2	fish, train
	bus	19		8	motorcar(8)
5	dog	20	2	5	cat(3), wild animal(2)
	bird 1	20	2	5	butterfly(2), tish, duck, chicken
6	trumpet	1	19	7	rifle(6), speaker
	mouth				
	organ	0	22	5	box(3), bag(2)
	guitar	16	9	2	rifle, key
	ballerina	25	2		all correct said a human being
7	mouse	17	5	5	cat(2), dog(2), rabbit
	antelope	8	9	10	horse(4), donkey(3), dog(3)
	horse	22		5	dog(5)
	rabbit	21	5	1	buck
8	boy	25		2	doll(2)
	basket	7	9	11	bag(11)
	suitcase	22	4	1	house
	bag	14	13		
9	teddy	25	2		all correct said a doll
	flower	15	1	11	tree(10), eggs
	tree 2	22	5		
10	doll	24	1	2	child(2)
	blouse 1	26	1		correct mostly said clothes
	blouse 2	26	1		
	blouse 3	23	2	2	church clothes(2)
Test 4					
G	ball	26		1	ball
	rabbit	19	3	5	cat(2), dog, wild animal(2)
1	flower	17	1	9	tree(9)
	mouse	22	3	2	cat(2)
2	girl	25	1	1	doll
3	nest	17	8	2	balls, dish
4	teddy	22	3	2	human being(2)
6	hen	22	2	3	bird(3)
7	boy	26		1	doll; all correct said person
	trees	24	3		
8	bird	24	2	1	chicken
	apples	22	3	2	tomatoes(2)
9	rabbit	16	2	9	dog(2), cat(3), mouse(2) wild animal(2)
	sweets	12	10	5	spoons(2), trees(2), earrings
10	doll	23	1	3	child(3)

(n=27)

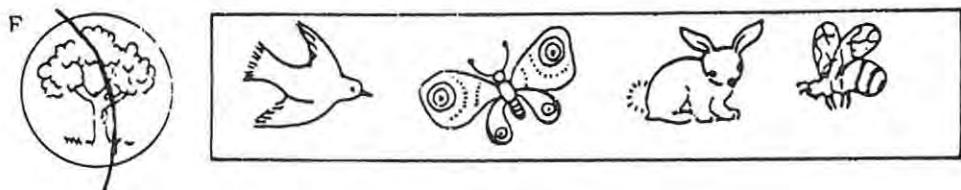
The following items could not be identified by a minimum of one-third of the group: the bird, butterfly, rabbit, bee, flower, fish, trumpet, mouth organ, guitar, mouse, antelope, basket, bag, flower. The difficulties experienced here, suggest the need for some modification of the test in future editions.

Continuing the same informal assessment of these 27 pupils, they were asked to perform test 3 (reasoning) orally so that they could explain why one item out of four did not fit. Even when the pupils could respond correctly, very few could explain why the item was different. The largest number of correct reasons given, were eight out of 27 and for half the items only one out of 27 could give an adequate explanation.

It was also noticeable during the test administration that the attention span of many testees was very short. In spite of short rest periods, many did not pay attention right through the exercise and had to be encouraged often to listen attentively and carry on with the task. The lack of task orientation as exemplified by Vaughan (1977) was evident. Many authors view task maturity as the most important criterion for school readiness.

The understanding of instructions was also poor. In spite of clear explanations and repeated demonstrations of what the "long box" was, many marked the picture in the circle in front of the long box instead of selecting a picture from the long box.

EXAMPLE



Linked with the inability of many children to understand or follow the instructions, was the frustration experienced by those who could perform adequately on the tests. When all these difficulties are considered, the limitation of group testing for young children can more easily be understood. According to the manual it is preferable not to test more than 15 testees at a time. When this number was exceeded (the largest group tested was 20), an extra Xhosa-speaking teacher rendered aid.

It is difficult to determine whether these misinterpretations are specific to rural Xhosa-speaking children. It certainly seems that further investigation along these lines is needed. Irwin and McLaughlin, cited in Freeman (1985), proved that results on tests improved when familiar objects were used.

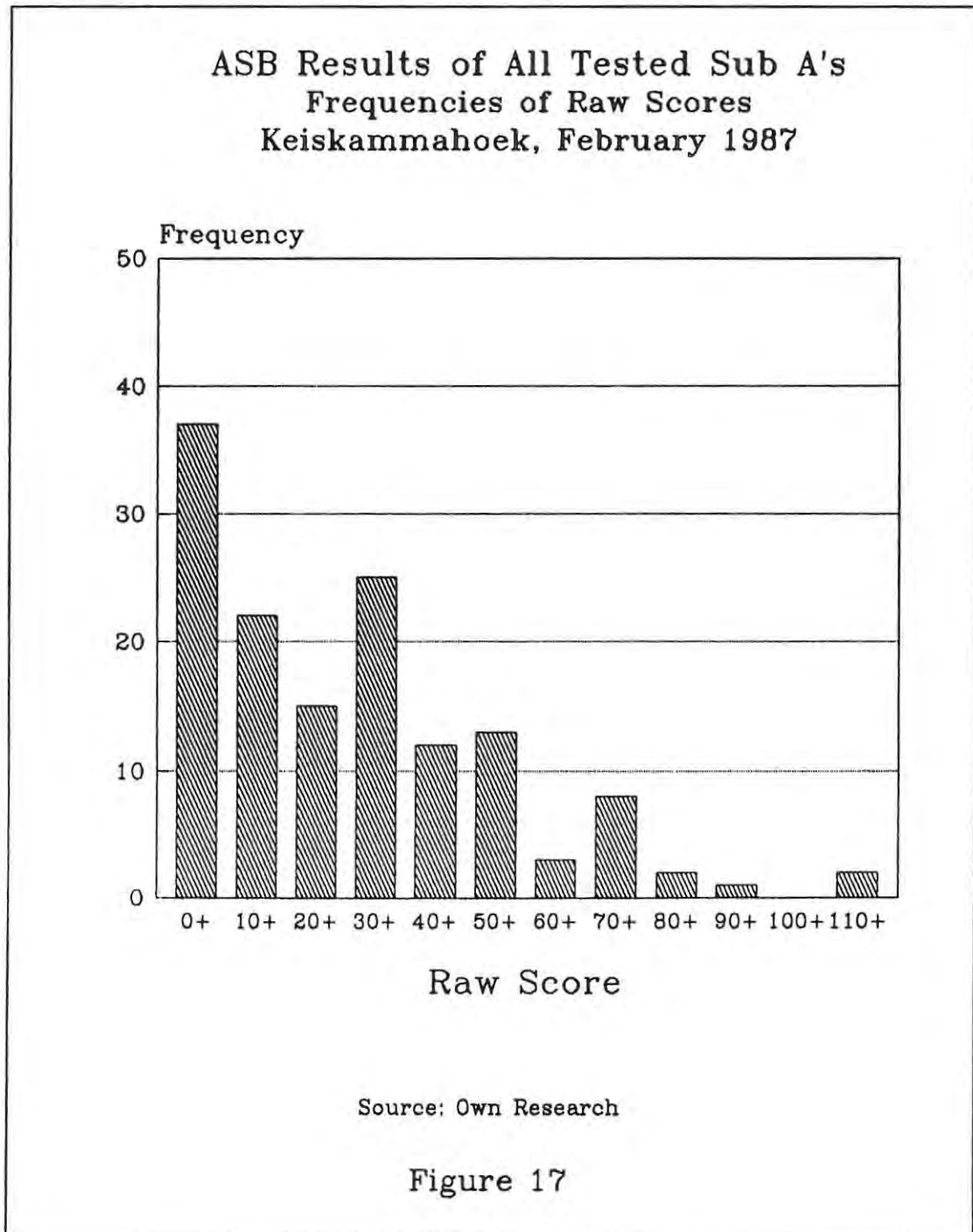
The **main findings** of the analysis of results and commentaries on them must now receive our attention. This is presented in four main divisions, namely the general situation in Sub A classes disregarding attendance of Educare Centres, the differences between the Experimental and Control Groups, age as a distinguishing factor and lastly the social-emotional rating of the Experimental and Control Groups.

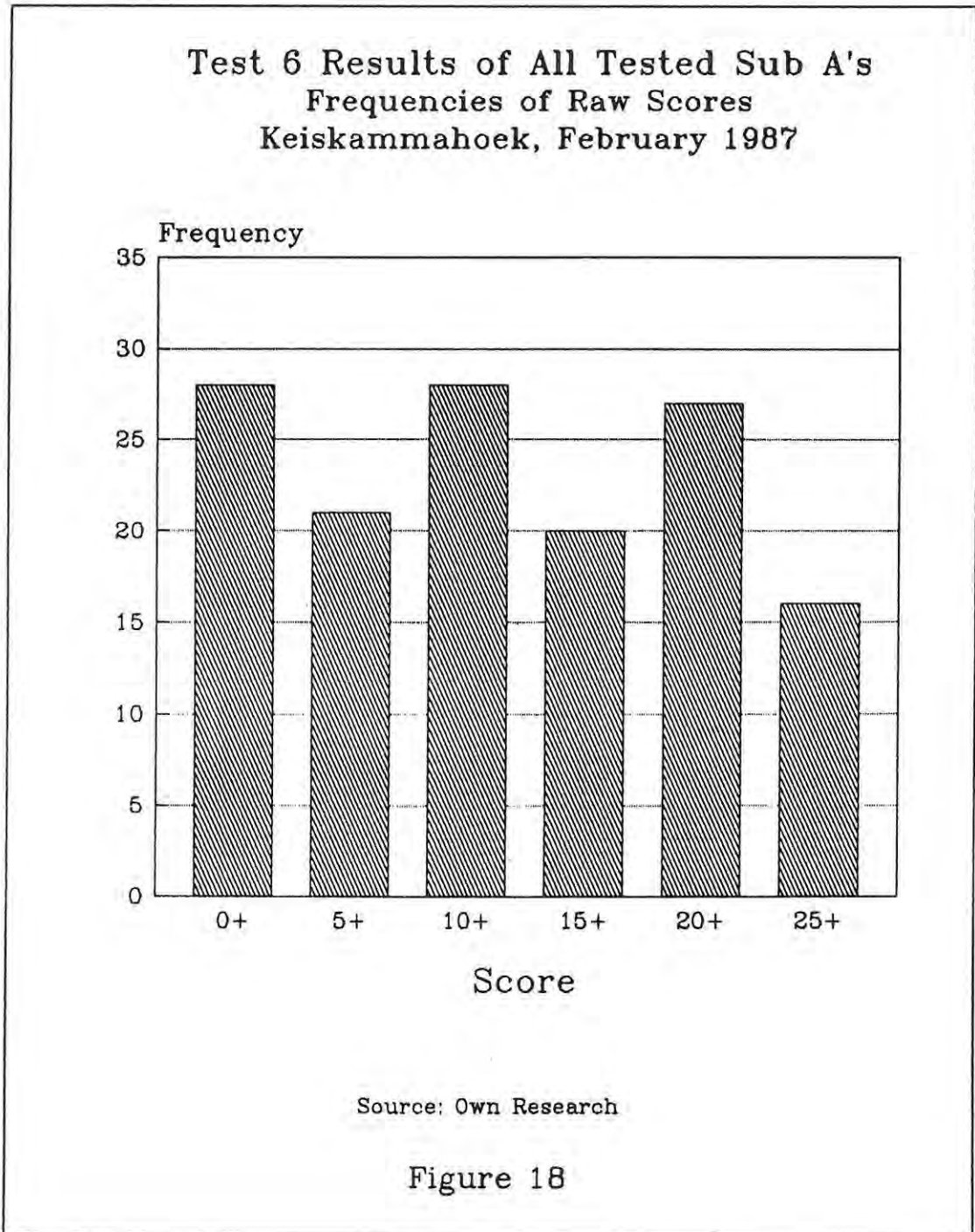
First the overall picture in Sub A, disregarding attendance of Educare Centres, is examined. Because data was available on more pupils than those that constituted the final sample, a more comprehensive picture of the aptitudes of pupils in Sub A can be presented. In total 140 pupils were tested. This number includes the 13 pupils who had been attending school in the previous year, but were not registered. They were included because it is important to know what the real situation is in the Sub A classrooms (see Appendix L for details of the results). The Abbreviated ASB battery (sub-tests 3, 4 and 5) and the test on co-ordination (sub-test 6) used in this investigation, had been described earlier in this chapter.

A frequency table in terms of the raw scores for all the testees is presented in Table 11:13 and shown graphically in Figures 17 and 18.

Table 11:13 Frequency Table in terms of the Raw Scores for all Testees

Abbreviated ASB			Test 6		
Score	No.	%	Score	No.	%
0- 9	: 37	(26,43%)	0- 4	: 28	(20,00%)
10- 19	: 22	(15,71%)	5- 9	: 21	(15,00%)
10- 29	: 15	(10,71%)	10-14	: 28	(20,00%)
30- 39	: 25	(17,86%)	15-19	: 20	(14,29%)
40- 49	: 12	(8,57%)	20-24	: 27	(19,29%)
50- 59	: 13	(9,29%)	25-29	: 16	(11,43%)
60- 69	: 3	(2,14%)	Total	140	
70- 79	: 8	(5,71%)			
80- 89	: 2	(1,43%)			
90- 99	: 1	(0,71%)			
100-109	: 0				
110-120	: 2	(1,43%)			
Total	140				





The raw scores were converted to staves following the instructions in the manual. Stave 1 represents the lowest and stave 5 represents the highest scores. It will be remembered that the sub-tests were standardised in such a way that in a normal population the distribution represents a normal distribution curve, and this standardisation was performed on Xhosa speaking pupils, both urban and rural. A frequency table in terms of the 5 staves is presented in Table 11:14 and Figures 19 and 20, comparing the testees' results with the norm.

Table 11:14 Distribution of Results in Staves for All Testees

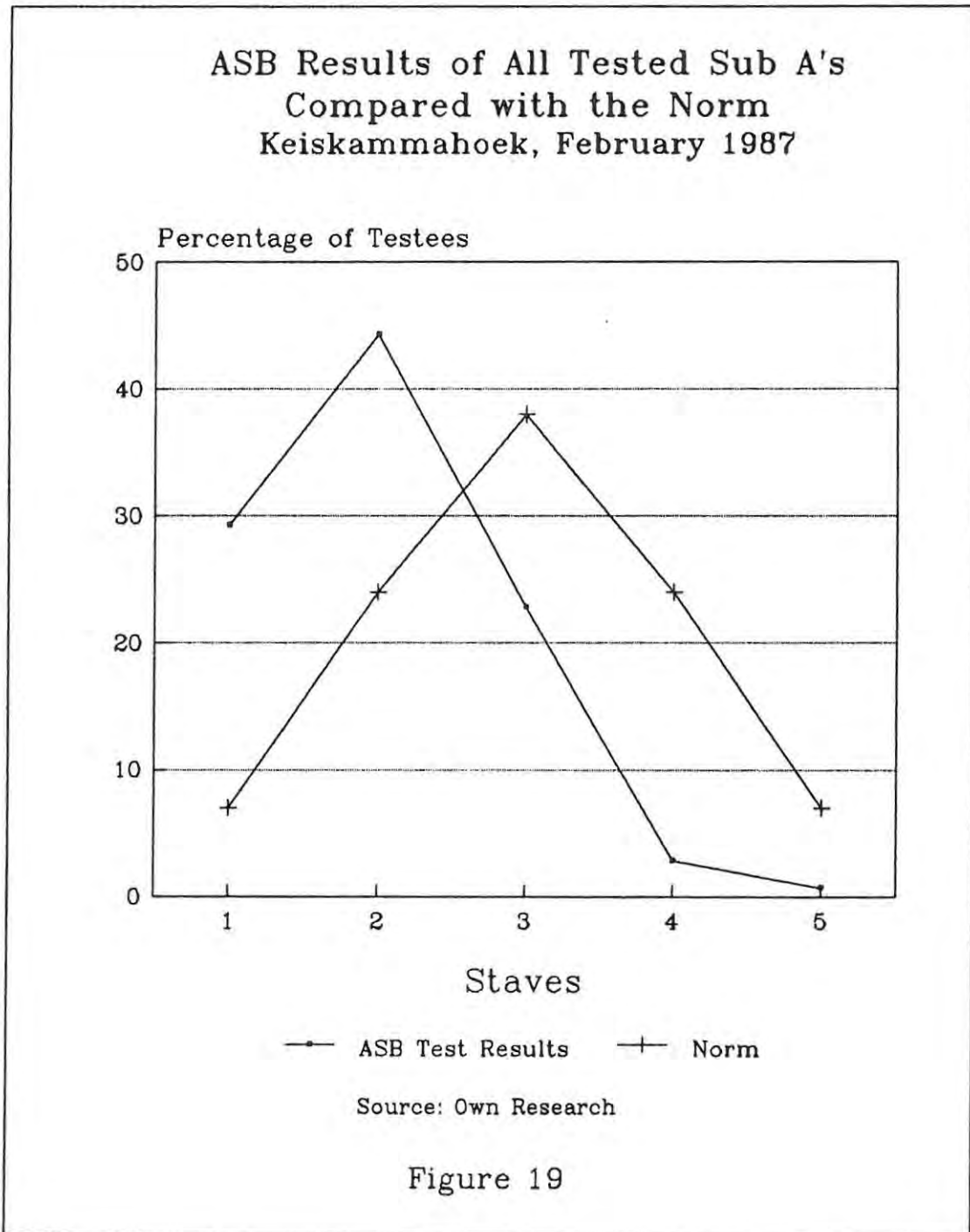
Abbreviated ASB			Test 6			Expected %
Stave	No.	%	Stave	No.	%	
1	41	(29,29%)	1	22	(15,71%)	7%
2	62	(44,29%)	2	48	(34,29%)	24%
3	32	(22,86%)	3	42	(30,00%)	38%
4	4	(2,86%)	4	23	(16,43%)	24%
5	1	(0,71%)	5	5	(3,57%)	7%
Mean:	2,021		Mean:	2,7		
S :	0,849		S :	1,001		

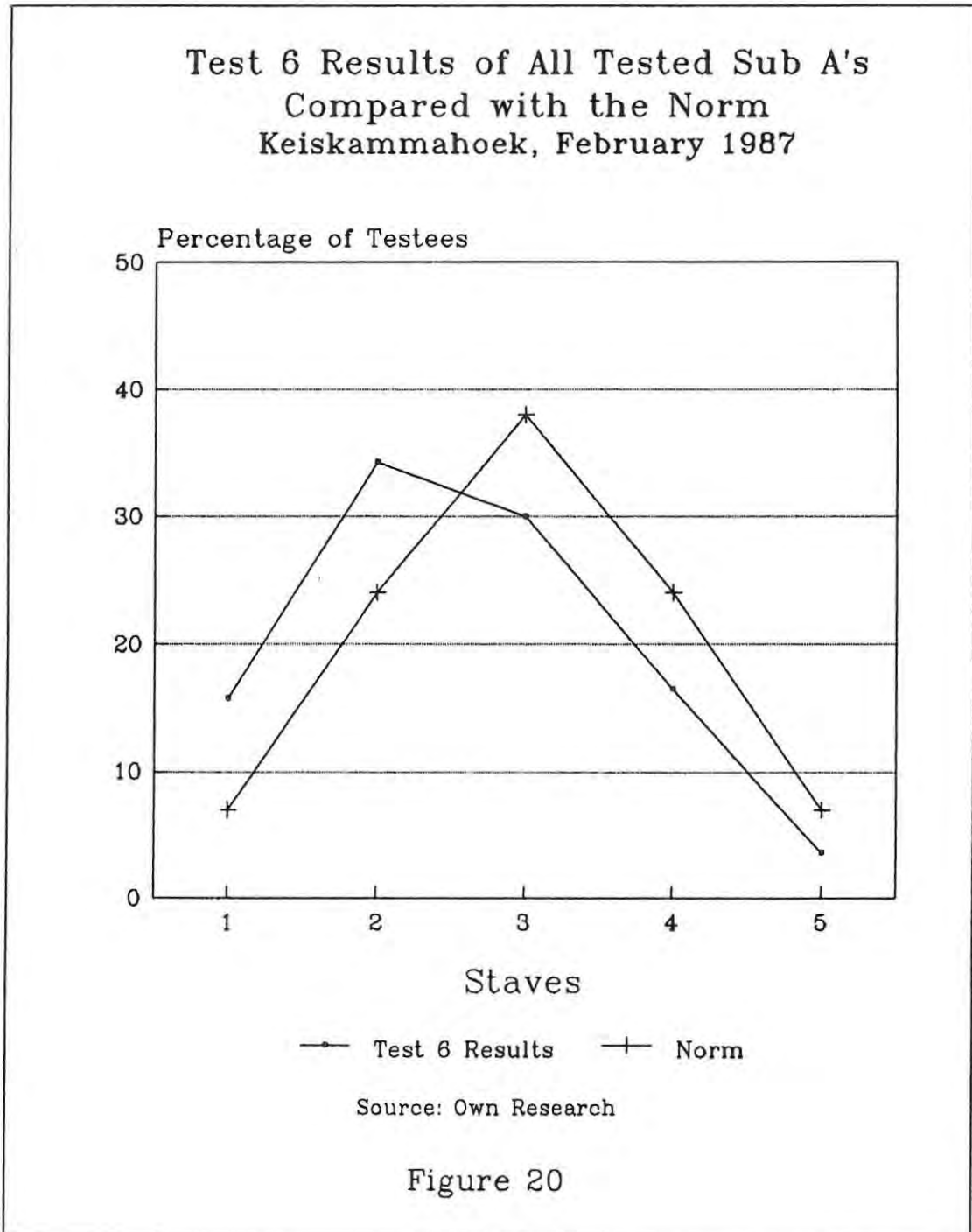
In these standardised tests the mean for the abbreviated battery of the ASB is 3 and the standard deviation is 1.

It is clear that a very big deviation from the percentages expected for each standard score exists. Fifty percent of the testees could not perform at a level above stave 2 in Test 6 while 73% of them could not do so in the Abbreviated ASB.

Possible reasons for the poor results could be advanced. These would include:

- * School unreadiness as a general concept, which includes the lack of all those abilities discussed in Chapter 6.
- * Admittance of very young immature pupils. Of the sample of 127 school beginners, 61 (48%) were 73 months and over when they entered school. Of the remainder, 31 (24%) were in the age range 68 - 72 months, or, in other words, they would turn six in the first few months of their Sub A year. Another 35 (28%) were considerably younger on entering school. Their ages ranged from 62 - 67 months. In other words, the youngest of the children would not turn six until the last few months of their first school year.
- * Uncertainty and unfamiliarity regarding the test instrument and procedures. The very considerable uncertainty displayed by some pupils during testing sessions, has already been described.





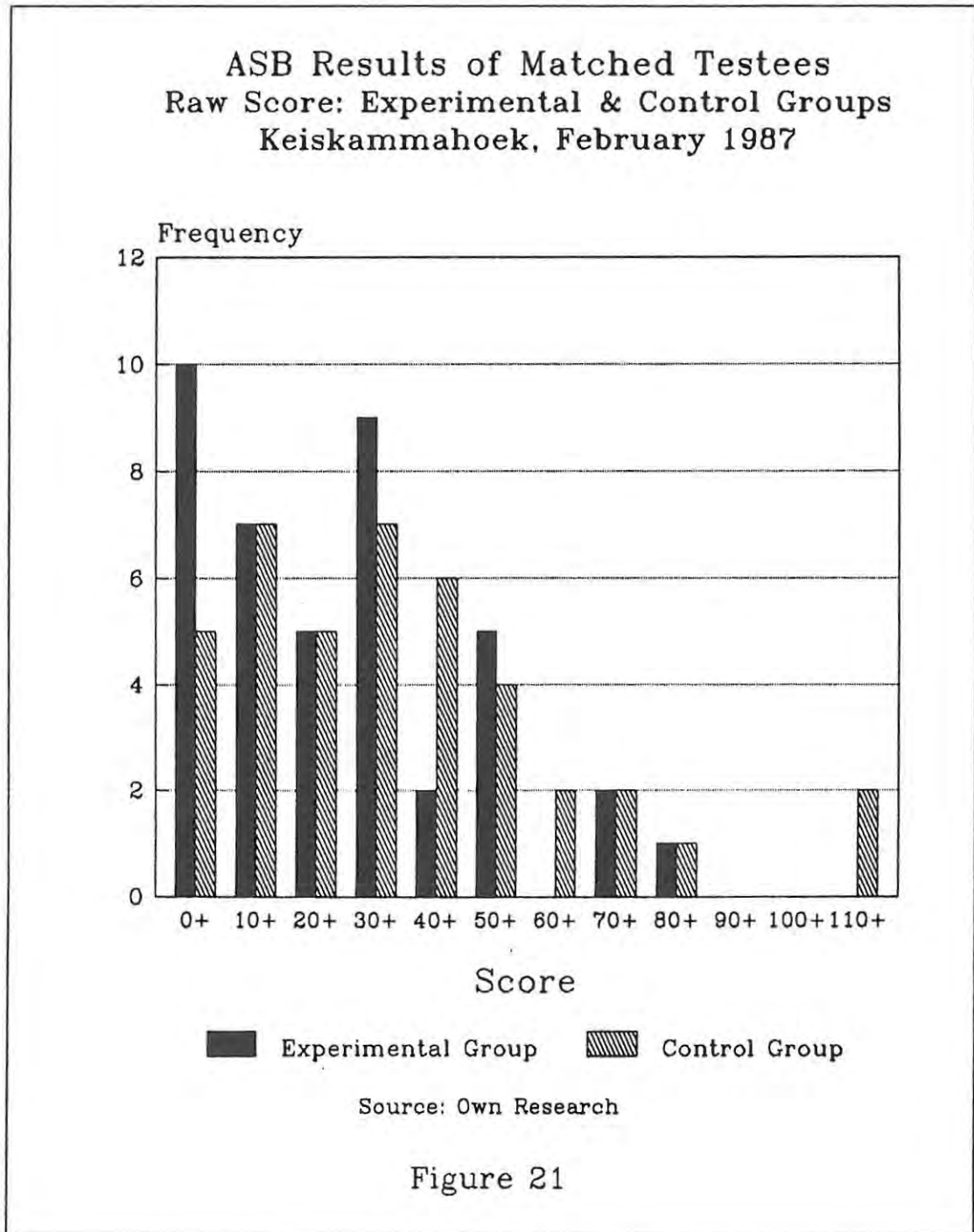
- * Lack of motivation and accompanying concentration.
- * The concentration of subjects in the lower performance levels was so great that one possibility might be inappropriate standardisation and test administration rules. The reader will remember the extent of the extreme difficulty some pupils had in following instructions and the difficulty of ensuring that even the practice examples were done correctly. This possibility is related to the difficulty already mentioned of testing groups of young children, as young as the subjects in this study.

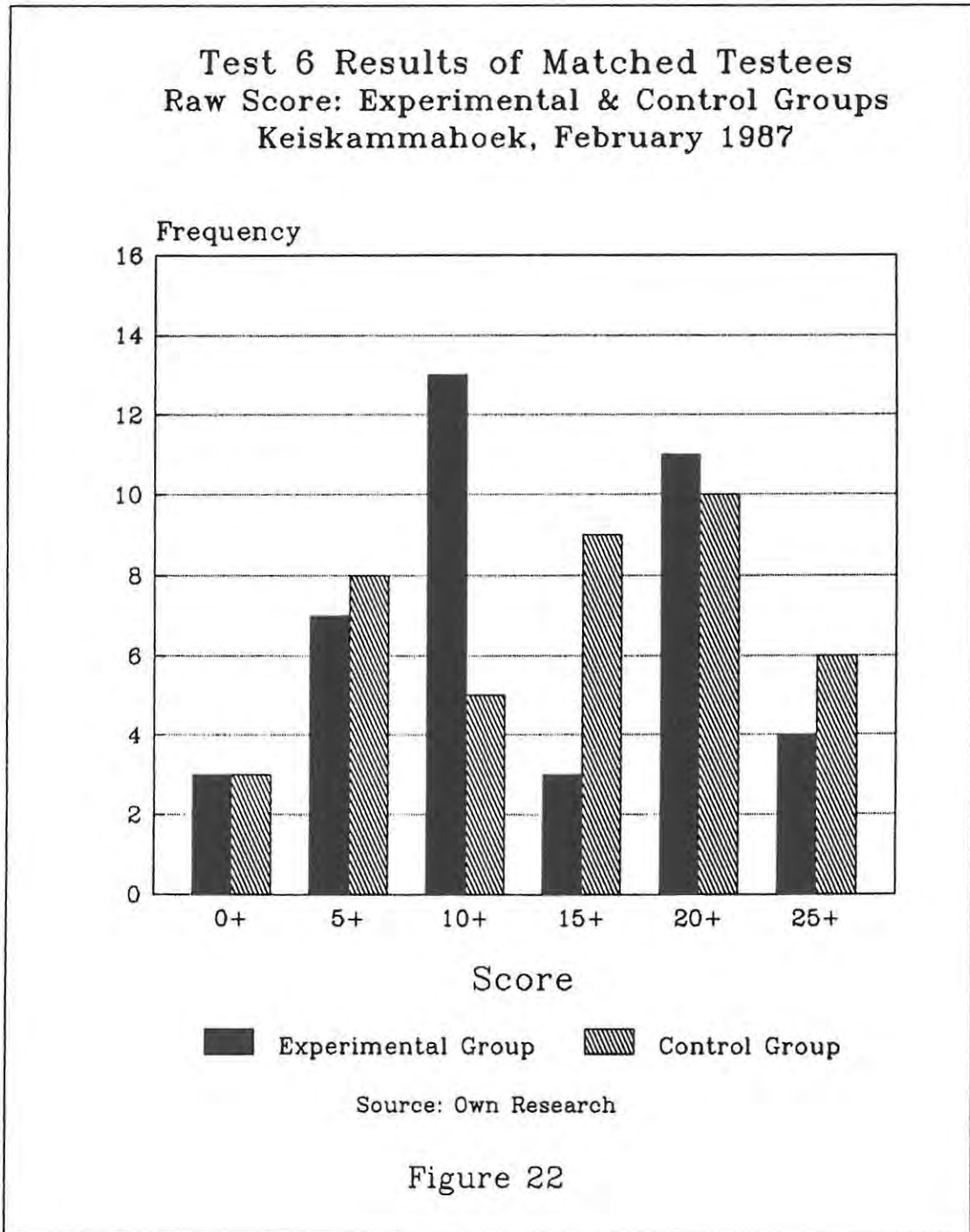
Whatever the reason, or reasons, might be, it is clear that a tremendous effort is needed to support rural school beginners and assist them to obtain a better degree of school readiness.

A key purpose of this investigation was to determine whether the Experimental Group (those children who had had the benefit of Educare experience) showed any advantage in the formal school situation over the Control Group, with no Educare experience. The Experimental and Control Groups' raw scores are presented in Table 11:15 and Figures 21 and 22.

Table 11:15 Raw Scores of Experimental and Control Groups

Score	No.	%	No.	%
Abbr. ASB	Experimental		Control	
0- 9 :	10	(24,39%)	5	(12,19%)
10- 19 :	7	(17,07%)	7	(17,07%)
20- 29 :	5	(12,19%)	5	(12,19%)
30- 39 :	9	(21,95%)	7	(17,07%)
40- 49 :	2	(4,88%)	6	(14,63%)
50- 59 :	5	(12,19%)	4	(9,76%)
60- 69 :	0		2	(4,88%)
70- 79 :	2	(4,88%)	2	(4,88%)
80- 89 :	1	(2,44%)	1	(2,44%)
90- 99 :	0		0	
100-109 :	0		0	
110-120 :	0		2	(4,88%)
Total	41		41	
Mean:	28,22		37,79	
S :	20,47		26,42	
Test 6	Experimental		Control	
0- 4 :	3	(7,32%)	3	(7,32%)
5- 9 :	7	(17,07%)	8	(19,52%)
10-14 :	13	(31,70%)	5	(12,19%)
15-19 :	3	(7,32%)	9	(21,95%)
20-24 :	11	(26,83%)	10	(24,39%)
25-30 :	4	(9,76%)	6	(14,63%)
Total	41		41	
Mean:	15,12		15,78	
S :	7,65		7,98	





The distribution in staves are compared with the norm in Table 11:16.

Table 11:16 Staves Obtained by Experimental and Control Groups

Abbreviated ASB : Staves			Test 6 : Staves			
Stave	Experimental	Control	Experimental	Control	Norm	
1	13 (31,7%)	6 (14,6%)	1	2 (4,9%)	3 (7,3%)	7%
2	19 (46,3%)	23 (56,1%)	2	18 (43,9%)	11 (26,8%)	24%
3	9 (21,9%)	9 (21,9%)	3	11 (26,8%)	17 (41,5%)	38%
4	0	2 (4,9%)	4	8 (19,5%)	9 (21,9%)	24%
5	0	1 (2,4%)	5	2 (4,9%)	1 (2,4%)	7%
Mean:	1,927	2,244		2,756	2,853	
S :	0,778	0,849		0,982	0,926	

An examination of the raw scores for the two groups immediately raises several issues. The first is the considerable advantage the Control Group has as far as the Abbreviated ASB battery is concerned, the difference in the mean scores being as great as nearly ten points. This advantage for the Control Group is also apparent in Test 6, although the difference between the means is very much smaller (0,66). The second issue is the very wide distribution of the scores. In the ASB test results they are almost as great as the mean scores. For Test 6 the standard deviation is approximately half the mean score. The third issue, which was equally apparent when the scores of the initial 140 pupils were presented (see Table 11:13), is the strong skewing of the ASB scores. The majority of the children could be expected to score around the 60 level. Over 70% of the Experimental Group failed to reach 40 points of raw score, and nearly 60% of the Control Group were concentrated in the same low score range. The raw score results for Test 6, on the other hand, are not so poorly skewed. This issue can be seen when raw scores are translated into staves in Table 11:16 and emerges very clearly when it is presented graphically in Figures 21 and 22.

It was clear that tests of significance needed to be applied to this raw score distribution. Simple statistical tests, namely a t-test for raw scores and a χ^2 -test for the stave categories, to confirm the result of the t-test, were used to show differences between groups.

t is given by the formula

$$t = \frac{\bar{X} - \bar{Y}}{\sqrt{\left(\frac{\sum x^2 + \sum y^2}{nx+ny - 2}\right) \left(\frac{nx + ny}{nx \times ny}\right)}}$$

where \bar{X} and \bar{Y} are the sample means, nx and ny the number of cases in each sample and x and y the deviations of the individual scores from the means of their respective samples.

$$d.f. = nx + ny - 2$$

The first null hypothesis to be tested was that there would be no significant difference in the performance on the test instrument between pupils who attended Educare Centres and those who did not.

The result of the t-test was as follows for the Abbreviated ASB battery: $t = 1,809$, $d.f.80$, $p > 1,959 = 5\%$ level of confidence, not significant.

Although the differences in raw scores seemed to favour the Control Group so clearly, these failed to reach the 5% level of significance in the t-test. It will be noted, however, that the t-value was approximating towards the 5% confidence limit.

A similar test was applied to Test 6 raw scores and the final result was as follows:

$t = 0,377$, $d.f. 80$, $p > 0,253 = 5\%$ level of confidence = not significant.

The likelihood of observed differences between the Experimental and Control Groups in Test 6 being attributed to chance, is considerably greater than in the ASB test scores. This result is not unexpected when the distribution for raw scores for Test 6 between the two groups are compared.

The next analysis was done on the distribution of the two groups over the five staves for each of the two tests. As the scores were now grouped into categories, a χ^2 -test was applied to the groupings.

Because of the small numbers in the ASB test in the upper staves (3-5), these were grouped together. The grouping can be seen in Table 11:17, together with the results of the χ^2 -test.

Table 11:17 χ^2 -test on Abbreviated ASB

Staves	1	2	3-5	Total
Experimental	13	19	9	41
Control	6	23	12	41
Total	19	42	21	82

$\chi^2 = 3,388$, d.f.2, $p > 5,991 = 5\%$ level of confidence, not significant.

When the data for Test 6 in stave categories was examined, further groupings had to be made because the numbers in the lower staves for Test 6 were also too small (less than 5 expected frequencies). Because the groupings were now in a 2 x 2 table, Yates' correction was applied. These groupings are shown in Table 11:18, together with the test result.

Table 11:18 χ^2 -test on Test 6

Staves	1-2	3-5	Total
Experimental	19,5	21,5	41
Control	14,5	26,5	41
Total	34	48	82

$\chi^2 = 1,256$, d.f.1, $p > 3,841 = 5\%$ level of confidence, not significant.

The final result of the statistical analysis up to this stage, is that the null hypothesis cannot be rejected. There is no significant difference between the Experimental and Control Groups. It must be noted that the difference that does exist, is in favour of the Control Group.

It would seem that Sub A pupils who attended Educare Centres did not perform better, on either the Abbreviated ASB or on Test 6, than those who had not attended such Educare Centres. This is contrary to what could be expected when related literature on the value of preschool education providing a better level of school readiness is considered. Failure to find significant differences in favour of the Experimental Group may be due to various reasons. Possibilities that could be considered include, firstly, the possible shortcoming that the pairs were not matched for intelligence. This problem was mentioned earlier in this chapter. It would be almost impossible to find a reliable group IQ test standardised for black pupils as young as those in Sub A. If this situation had been the only way of accounting for the lack of significance between the two groups, then considerable doubt would have

to be placed on the findings in this study. Other features, however, which have emerged from the description of Educare Centres in the Ciskei also need to be taken into account. There are at least six of these which might account for the failure to find significant differences:

- * The severe lack of equipment in Educare Centres.
- * Large numbers in Educare groups.
- * Very young children (below three years of age) diverting the attention of supervisors and assistants.
- * Irregular attendance at Educare Centres.
- * The low level of training of the supervisors.
- * Poor home conditions. There is a possibility that the home conditions of the Control Group of children were considerably better than those of the Experimental Group. When the general conditions in Ciskei as a whole (see Chapter 7) and the analysis of a sample of Educare children (see Chapter 10), is remembered, this explanation is unlikely. What is more likely, is that the home conditions of the entire group (both Experimental and Control Groups) were sufficiently unstimulating that the formal schooling procedures in Sub A proved to be too demanding for all children.

A second stage of analysis was then considered. This concerned the effect of the pupils' age on the scores they obtained. The null hypothesis that there would be no significant differences between the older and younger children, was set up.

Regulations restricting pupils from entering formal schooling before an acceptable age are operative in most countries. In Cape Provincial Administration schools (white), for instance, no child is allowed to start formal schooling if he does not turn six before 30 June of the year in which he is enrolled. In Ciskei such regulations could not be confirmed by the officials contacted, but there was sufficient informal evidence both from Educare Centres and in the primary schools visited, that very young children are often found in Sub A.

For the purposes of this investigation, the sample of pupils was divided into three age groups:

- (a) 62-67 months (Very young)
- (b) 68-72 months (Marginal)
- (c) 73 months and older (Regarded as old enough).

After preliminary observations showed that both groups (a) and (b) did not perform well on the Abbreviated ASB battery, it was decided, in the first instance, to combine groups (a) and (b) and have only two categories: under 73 months and 73 months and over. In this analysis the scores of genuine school beginners only are included and no distinction is made between those who had been to Educare Centres and those who had not. The distribution of raw scores of the 127 school beginners are shown in Table 11:19 and the distribution in staves in Table 11:20, for both the ASB and Test 6.

Table 11:19 Distribution of Raw Scores of School Beginners in Two Age Groups

Score	Abbreviated ASB				Test 6				
	72 months and under		73 months and over		72 months and under		73 months and over		
	No.	%	No.	%	Score	No.	%	No.	%
0- 9:	25	(37,9%)	8	(13,1%)	0- 4:	19	(28,8%)	5	(8,2%)
10- 19:	14	(21,2%)	5	(8,2%)	5- 9:	10	(15,2%)	8	(13,1%)
20- 29:	6	(9,1%)	8	(13,1%)	10-14:	12	(18,2%)	13	(21,3%)
30- 39:	9	(13,6%)	14	(22,9%)	15-19:	8	(12,1%)	12	(19,7%)
40- 49:	6	(9,1%)	5	(8,2%)	20-24:	9	(13,6%)	15	(24,6%)
50- 59:	1	(1,5%)	12	(19,7%)	25-29:	8	(12,2%)	8	(13,1%)
60- 69:	1	(1,5%)	2	(3,3%)					
70- 79:	3	(4,6%)	4	(6,6%)					
80- 89:	1	(1,5%)	1	(1,6%)					
90- 99:	0		0						
100-109:	0		0						
110-120:	0		2	(3,3%)					
Total :	66		61			66		61	
Mean:	21,182		39,066			11,742		15,721	
S :	20,696		24,047			9,573		7,309	

Table 11:20 Distribution in Staves of School Beginners in Two Age Groups

Stave	Abbreviated ASB				Test 6			
	72 months and under		73 months and over		72 months and under		73 months and over	
No.	%	No.	%	No.	%	No.	%	
1	29 (43,9%)	9 (14,8%)	1	17 (25,8%)	4 (6,6%)			
2	24 (36,4%)	31 (50,8%)	2	21 (31,8%)	18 (29,5%)			
3	13 (19,7%)	17 (27,9%)	3	15 (22,7%)	25 (41,0%)			
4	0	3 (4,9%)	4	10 (15,2%)	12 (19,7%)			
5	0	1 (1,6%)	5	3 (4,5%)	2 (3,3%)			
Mean:	1,758	2,279	Mean:	2,409	2,836			
S :	0,760	0,832	S :	1,154	0,926			
All school beginners				Mean: 2,752				
Mean: 2,008				S : 1,003				
S : 0,837								

Simple observation of these tables shows a clear concentration of younger pupils in the lower frequencies for both tests. The distinction emerges even more clearly when Figures 23 and 24 are considered where the two age groups' stave ratings are compared with the expected distribution of scores from the standardisation. In the ASB test the older pupils' distribution approximates to the normal distribution, whereas the younger pupils' distribution bears no relationship at all to a normal distribution (see Figure 23). Figure 24, which is concerned with Test 6 results, shows that the older pupils' performance is very close to that of the norm, whereas the younger pupils once again deviate widely from it. The strong similarity between the older pupils' performance and the expected norm emerges even more clearly in Figure 25 where results of the younger pupils have been removed.

From the observation of the data when children were grouped into age clusters, it was clear that more precise statistical analyses should be made. *t*-tests were applied to the raw scores obtained by the two groups and the results for both tests are shown in Table 11:21.

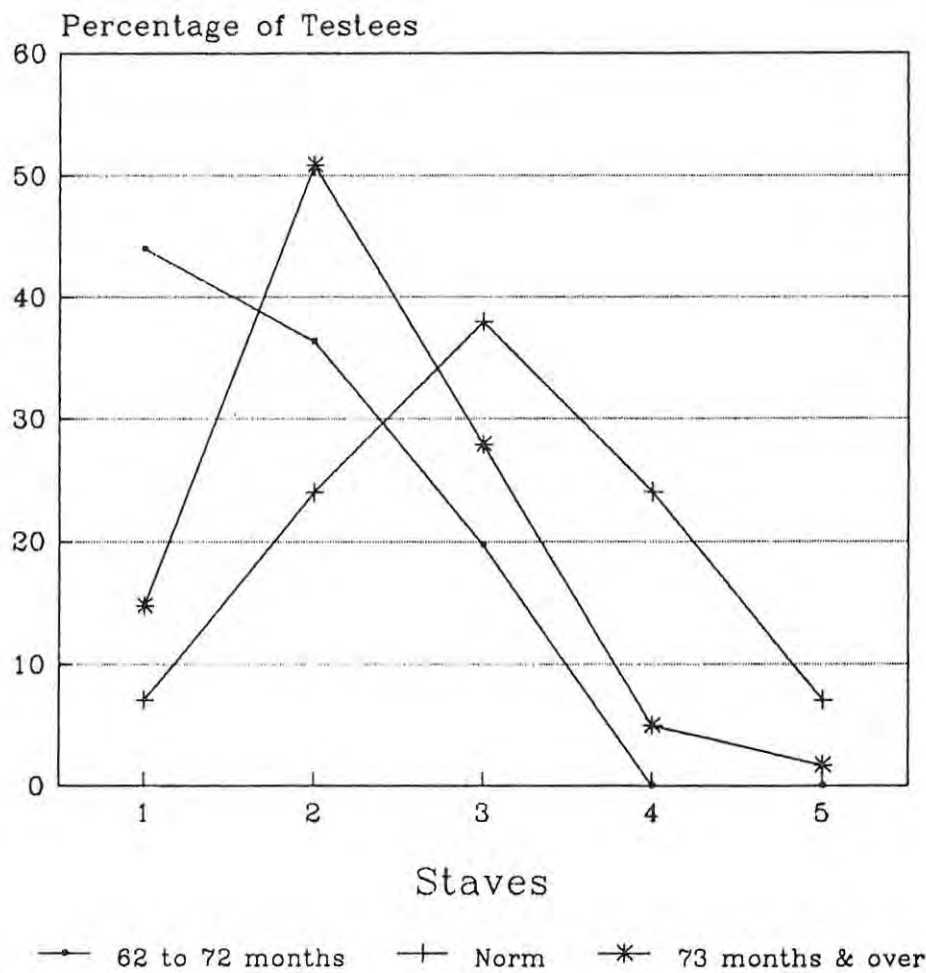
Table 11:21 *t*-test Results of Two Age Groups of School Beginners

Test	<i>t</i> -value	d.f.	Significance
Abbr. ASB	4,401	125	$p < 2,576 = 1\%$ level
Test 6	2,579	125	$p < 2,576 = 1\%$ level

From this table it can be seen that there are significant differences between performances of the younger and older children on both tests, in favour of the older pupils and it is highly unlikely that these differences could be attributed to chance. In these circumstances any null hypothesis must be rejected.

Research by various investigators such as Potgieter (1961), Stulting (1971), Jooste (1976), and Kruger (1984) has revealed that older pupils are likely to give better performances in their first year of formal schooling.

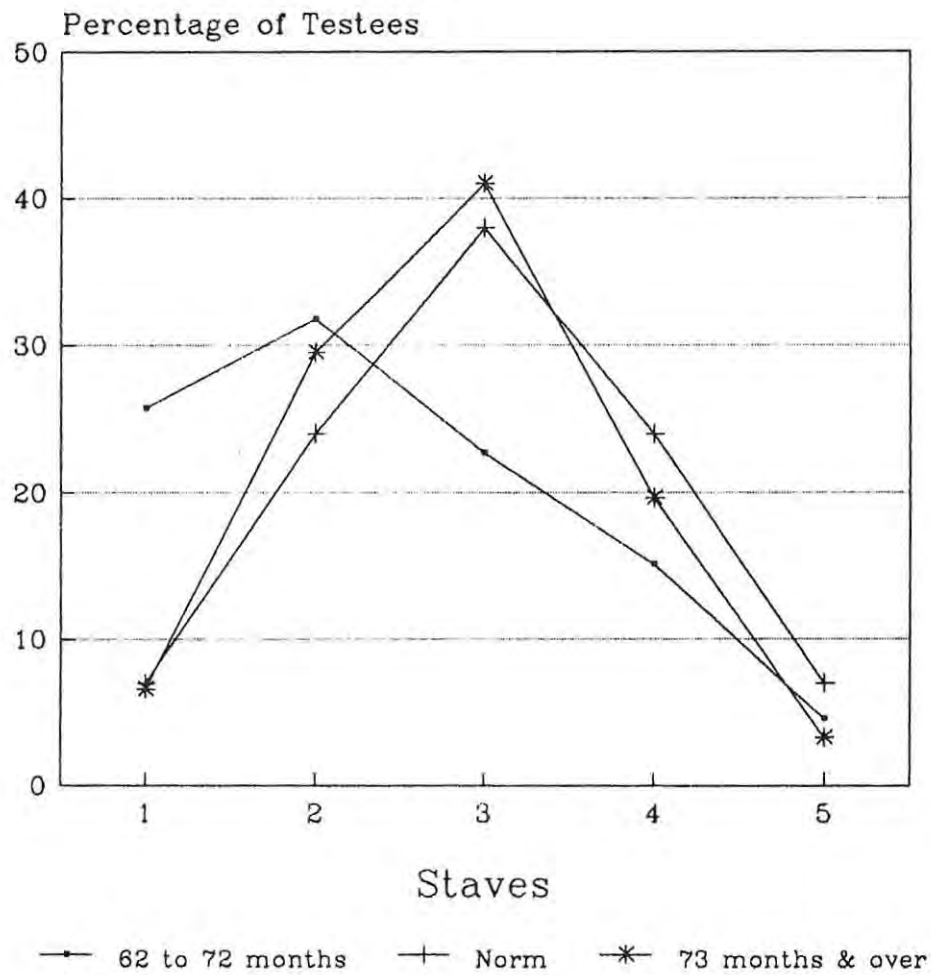
ASB Results of School Beginners
 Age Groups Compared with the Norm
 Keiskammahoek, February 1987



Source: Own Research

Figure 23

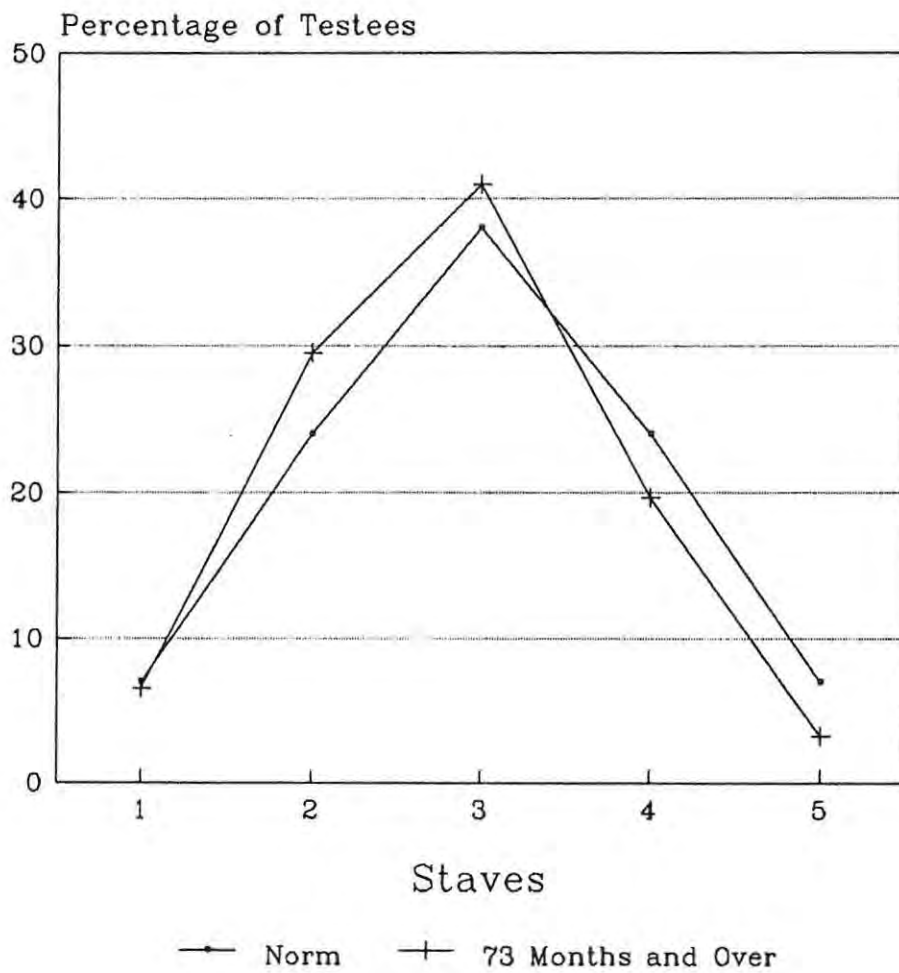
Test 6 Results of School Beginners
 Age Groups Compared with the Norm
 Keiskammahoek, February 1987



Source: Own Research

Figure 24

Test 6 Results of School Beginners 73 Months & Over Compared with the Norm Keiskammahoek, February 1987



Source: Own Research

Figure 25

After the significant difference in favour of the older pupils was established, it was clear that a return to a more precise categorisation would be justified. The three age ranges already described, were used. Firstly, the differences in scores were calculated. An unexpected result was found within the 62 - 72 months group: the averages obtained suggest that the youngest group did better than the middle group. In the Abbreviated ASB battery the mean of the youngest group was 23,63 and that of the middle group 18,42. Consequently t-tests were applied, of which the results are shown in Table 11:22.

Table 11:22 t-test results for the differences in means among three age groups of School Beginners on the ASB test

Age Ranges	t-value	d.f.	Significance
(a) 62-67 months and 68-72 months	1,020	64	$p > 1,959 = 5\%$
(b) 62-67 months and 73-94 months	2,978	94	$p < 2,576 = 1\%$
(c) 68-72 months and 73-94 months	4,123	90	$p < 2,576 = 1\%$

This result reveals that the difference in the first comparison (involving the younger children), is not statistically significant. In other words, the observed difference was likely to occur merely by chance. From the results of the Abbreviated ASB it would seem, therefore, that the younger group is likely to perform poorly regardless of finer differentiation of age. When the youngest and oldest groups are compared, and when the middle and oldest groups are compared, the differences in performance reach statistical significance at the level of 1%. In both cases the older the group, the better is the performance.

Slightly different results emerged from Test 6. The youngest group, however, once again obtained a higher average of 12,86 as compared to 10,48 for the middle group. The results of the t-tests are shown in Table 11:23.

Table 11:23 t-test results for the differences in means among three age groups of School Beginners on Test 6

Age Ranges	t-value	d.f.	Significance
(a) 62-67 mths and 68-72 mths	1,005	64	$p > 1,959 = 5\%$
(b) 62-67 mths and 73-94 mths	1,560	94	$p > 1,959 = 5\%$
(c) 68-72 mths and 73-94 mths	2,967	90	$p < 2,576 = 1\%$

Once again no significant difference was found between the youngest and middle group. The difference which existed in favour of the oldest group, when compared to the youngest group, however, failed to reach significance on the 1% level. Reasons could possibly be advanced for this unexpected result: Test 6 results are to a great extent dependent on practice and handling of writing materials, of which both groups had equal experience in the first six weeks in Sub A. The difference between the middle and oldest groups is shown to be statistically significant, i.e. it is not likely to occur by chance.

The results, when age was taken into account, were further examined by converting the raw scores into staves and applying χ^2 -tests to these groupings. Table 11:24 is concerned with the ASB results. To obtain sufficient numbers in the cells, three stave categories were created and the children were divided into only two age groups.

Table 11:24 Distribution for χ^2 -tests in Two Age Groups of School Beginners

		Abbreviated ASB			
Staves		1	2	3-5	Total
62 - 72 months		29	24	13	66
73 months and over		9	31	21	61
Total		38	55	34	127

χ^2 -value 13,123, d.f. 2, p " 9,210 = 1% level of significance.

Once again it would seem as if the age of the pupils plays an important role in test performance, and therefore, by implication, school performance.

The comparison between the stave ratings was taken a stage further. In the previous analysis all the pupils who attended school for the first time in 1987 were included. In the next stage the results of those pupils who would be placed in the matched pairs, were isolated, grouped into three stave categories, and divided into two age categories as shown in Table 11:25.

Table 11:25 Distribution of Abbreviated ASB Results for χ^2 -Test in Two Age Groups within the Matched Pairs

Staves	1	2	3-5	Total
62 - 72 months	15	17	10	42
73 months and older	4	26	10	40
Total	19	43	20	82

χ^2 -value = 8,208, d.f.2, $p < 5\%$; $> 1\%$ level of confidence, Significant.

There is a great difference between the performances of the two age groups. This finding, that children of 73 months and older have a better chance to succeed in Sub A than those who enter school when they are not yet 73 months, bears out the conclusions drawn by many South African researchers, as described in Chapter 6. In Cronje's study, for example, 95,7% of those over six were found to be ready for school, as compared with only 4,3% of those under six.

One further question had to be asked about the children's performance on these tests. It has been shown, firstly, that Educare experience does not affect the pupils' performance in Sub A. In fact, there is a tendency, although this does not reach a level of statistical significance, for those without Educare experience, to perform better than those who have had it. Secondly, the data was re-arranged to see if the age of the pupils was related in any way to test performance. The results show that this factor has a considerable influence on performance, at times reaching statistically highly significant levels of difference. Tests were then applied to see if the age factor could account for differences of performance between the Experimental Group and the Control Group. Two age groupings were used: 62 months - 72 months and 73 months and over. The first table (Table 11: 26) looks at the performance of those children who entered school at 72 months and under.

Table 11:26 Distribution in Staves within the Experimental and Control Groups on the Abbreviated ASB : 62 - 72 months

Staves	1-2	3-5	Total
Experimental	16,5	5,5	22
Control	15,5	4,5	20
Total	32	10	42

$\chi^2 = 0,036$, d.f. 1, $p > 3,841 = 5\%$, not significant.

The next table (Table 11:27) looks at the performance of those children who entered school after they had already turned six.

Table 11:27 Distribution in Staves within the Experimental and Control Groups on the Abbreviated ASB : 73 months and over

Staves	1-2	3-5	Total
Experimental	14,5	4,5	19
Control	14,5	6,5	21
Total	29	11	40

$\chi^2 = 0,264$, d.f. 1, $p > 3,841 = 5\%$, not significant.

It would seem as if the general trend of the results is confirmed by this analysis. The variable of preschool experience in an Educare Centre does not affect the performance on the tests, no matter whether the child falls in the younger or older age group.

Finally it can be stated that in this study chronological age emerged as a distinguishing factor for successful entry into formal school rather than attendance of Educare Centres. It must, however, be borne in mind that the pairs were not matched on intelligence and by chance the more clever ones could have been better represented in the Control Group.

Although chronological age is not accepted as a good indicator of school readiness, few very young pupils perform well. Research by Bigelow, cited in Lehobye (1978), has indicated that a child less than six years old must have an IQ of above 120 to make good progress in grade 1. Of the 10 testees in the present investigation who were removed from the sample because of their inability to handle the test, eight were under six at school entry.

The fourth and final variable to be considered, was the socio-emotional adjustment of the pupils. Would those who had attended Educare Centres rate more highly than those who had not? A very simple 5 point rating questionnaire was presented to the Sub A teachers. This is shown in Appendix M and covers aspects of language, verbal ability, associative memory, linguistic comprehension, social adjustment and emotional stability in ten questions. The teachers' ratings were then scored in a very simple way, by apportioning a numerical weighting of 1 to 5 for each of their ratings. These weightings were then totalled to give a maximum score of 50. A t-test was applied on the scores obtained in this way by the Experimental and Control Groups. The following result was obtained:

$t = 0,621$, d.f. 80, $p > 1,959 = 5\%$, not significant.

Once again it could be seen that Educare experience has not contributed significantly to the pupils' adjustment in the first part of their formal schooling year. It must be pointed out, however, that this is a very simple test, and that the teachers had not necessarily been trained in this kind of observation and so the ratings and the results of the t-test must be treated with care. Despite this, the results fit the general trend found in the other analyses.

Future studies can fruitfully investigate the reasons. The home background of each testee will have to be taken into account. A possibility is that children who are well cared for by their own mothers and come from stable family set-ups are not sent to Educare Centres. This initial difference may cause a better rating for them. The short period of exposure to the kind of programme described cannot compensate for earlier disadvantages suffered by children who were neglected at home.

In this chapter shortcomings in the adjustment of Sub A pupils and in their ability to perform school-related tasks, were revealed by the subjective assessment of teachers and by administering an objective instrument, the Aptitude Test for School Beginners. It was further shown that the children who had attended Educare Centres in the Keiskammahoek District, did not perform significantly better in the ASB, although subjective ratings by Sub A teachers the previous year, were

strongly in favour of Educare children. Significant differences were, however, found in favour of pupils who were already six when they started school. It would seem as if the period of exposure and the kind of programme offered in the Educare Centres were not sufficient to bring about a better degree of school readiness. It would further seem as if younger pupils had more problems reaching an appropriate level of readiness.

In the next chapter conclusions are drawn about the provision of Educare in a rural Ciskeian setting and some recommendations are made.

CHAPTER TWELVE

CONCLUSION AND RECOMMENDATIONS

Poor school achievement and high drop-out rates in the sub-standards in developing countries indicate a fundamental problem, calling for the investigation of preschool education as well as the related problem of school readiness. In first world countries studies on school readiness have focused mainly on those individuals who have not reached an acceptable level of functioning or on small groups that are considered as deprived within a bigger community. In third world situations it is, however, the whole population that finds itself at a disadvantage with inadequate preparation for becoming part of a formal school system which assumes certain abilities and skills they do not possess.

Various South African research studies on third world situations have revealed lags in the development of school beginners in areas like visual perception (Steenekamp 1971 and Herbst 1986), cognitive development and communication (Bakara 1970), task orientation and individualisation (Vaughan 1977), and perceptual-motor abilities (Bodenstein 1983).

The question that was addressed in this thesis, was whether the success claimed for first world preschool programmes in fostering school readiness, would also manifest itself in third world situations. What inputs would be required? Could a third world community that has made some progress in acquiring first world skills, conduct a preschool programme on its own, falling back on its own resources?

A literature study was carried out to examine models of preschool provision; the Open Education model (see Chapter 4) was considered most appropriate, with the provision that activities were connected with

learning readiness (Bakara 1970) and that the teacher played a more directive role (De Korte 1977). The problem of school readiness was investigated and possible causes of unreadiness and programmes to foster readiness were examined.

The rapidly expanding preschool project in the rural area of Keiskammahoeck in Ciskei was investigated as an example of community-based low-cost preschool education. By means of interviews and questionnaires a picture was obtained of the kind of preschool educational exposure experienced by this rural preschool population. It proved to be of a conformistic nature with very limited scope for exploration/creativity and lacking provision of "readiness" experiences.

Yet this type of community-based preschool education has the potential for providing opportunities for the physical, social and cognitive development of the child, provided that the supervisors of Educare Centres are well trained and the necessary equipment is made available. Instituting a bridging year before the child starts formal education, would be a further progression.

Community involvement proved to be of crucial importance in determining success. Studies by Rhenoster (1971), Davids (1984), De Landsheere (1977) and Bodenstein (1982) were cited to demonstrate the importance of community involvement. In the study area assistance in the form of buildings, gardens, water and the services of the supervisors and assistants (who were not initially paid) opened possibilities for low-cost rural preschool education.

Funding proved to be a serious problem. Poverty prevented parents from contributing towards expenditure on equipment. Although 90% of the families were reported to pay monthly fees, the majority paid only 20c per month (see Chapter 10).

Proper training of staff was found to be of utmost importance. The need for staff is overwhelming and the corps of trained preschool teachers grossly inadequate. Intermediate use of para-professional staff is therefore inevitable. Existing training was found to be too theoretical. Opportunities for creativity were generally neglected. Too little use was made of the training provided by the Border Early Learning Centre in training para-professional staff.

The initial feedback received from Sub A teachers on the school adjustment of children who had attended Educare Centres as contrasted to those who had not, was very positive (see Chapter 11). An objective measuring instrument was applied to substantiate the subjective opinion of teachers. The Abbreviated Aptitude Test for School Beginners was decided on because it is standardised on Xhosa-speaking school beginners. A statistical analysis was carried out. A t-test for the significance of differences between means was used on raw scores and chi-squared tests were performed on the staves. No significant difference was found between the experimental and control groups. Reasons forwarded for failing to find a better performance by the experimental group, included the severe lack of equipment in Educare Centres, large numbers of children in groups, the presence of very young children, irregular attendance at Educare Centres, the low level of training of supervisors, and poor home conditions.

The scholastic abilities of school beginners in the Keiskammahoek District, as tested, were poor. Results deviated grossly from standardised norms. Whereas the expected percentage for the combined categories of Very Weak and Weak is 31%, no less than 73% of the testees fell in this class. Evidently these children needed opportunities to develop their visual perception, logical reasoning, discrimination, classification, number concepts and co-ordinated perceptual-motor activities.

Chronological age emerged as a possible determining factor for better performance on the test instrument. The t-test results indicated a significant difference in favour of testees older than six years as compared to those under six years (see Chapter 11). Studies by Jooste (1976), Potgieter (1961), Van der Spuy (1966), Kruger (1984) and Cronje (1980), support this finding.

An analysis of the scores obtained by testees on a subjective rating scale for their general-linguistic development and their socio-emotional adjustment, indicated no significant difference between means of the experimental and control groups. This probably indicates that the level of efficiency of the Educare Centres in Keiskammahoek was not high enough to render the required stimulation for successful school entry.

This finding does not distract from the impressive achievement of the Keiskammahoek community in attempting to pull itself up by its bootstraps.

Recommendations

This investigation indicated the need for organised preschool education in rural areas in Ciskei. Attempts to improve the situation have not so far yielded satisfactory observable results. The following recommendations are made:

Firstly, those with substantial financial implications are stated, namely

- * Better training of para-professional staff by qualified staff.
- * Training of qualified staff to provide expertise in the field of preschool education in Ciskei.
- * Provision of sufficient educational materials by Government subsidies and private sponsors.
- * Institution of bridge classes by the Ciskei Department of Education.

This should take place as soon as possible to provide structured preparation for formal education. All children should start attending the class at the beginning of the year in which they turn six.

Secondly, recommendations without financial implications include

- * Investigation of regulations regarding entrance age for basic education. Only in exceptional cases should children who have not turned six, or will not do so within two or three months, be admitted to formal schooling.
- * Daily programmes in Educare Centres geared towards learning readiness without becoming academic. Existing readiness programmes should be adapted for 5-year-olds with stress on visual perception, perceptual-motor co-ordination and individual creativity.
- * An age limit of three years for admittance to Educare Centres. Very young children should be catered for separately.
- * Liaison between Sub A teachers and Educare staff. Such contact could prove to be very fruitful (see Chapter 11). Principals of schools could serve on village committees responsible for preschool education.

To alleviate the plight of the rural school beginner, these recommendations require the urgent attention of all those anxious to raise educational standards.

Appendix A PRE-SCHOOL SUPERVISOR SUITABILITY QUESTIONNAIRE

NAME:

Address:

.....

.....

Age:

Highest standard reached at school:

Why do you want to work in the pre-school field:

.....

1. Previous experience with young children:

2. What do young children learn?

Here are some things children learn when they are young. They can learn all these things at home. Read through the list and answer each question.

If you think you must help a child to learn, write yes in the space.If you think he can learn by himself write no to the space.2.1 When he is a baby, he must learn what is part of his own body and what is not.
Does he need your help?2.2 He learns who his mother and father are.
Does he need your help?2.3 As he gets older, he learns how to use his body, eg to sit, to walk, to pick up
and hold things.
Does he need your help?2.4 He learns to be friendly, or he learns to be suspicious.
Does he need your help?2.5 He learns what different things are used for, eg a cup is for drinking out of, a
jersey keeps him warm, chairs are for sitting on.
Does he need your help?2.6 He learns how to help himself, eg how to feed himself, to dress himself, how to
cross the road.
Does he need your help?2.7 He learns how to talk and he learns many, many words.
Does he need your help?2.8 He learns about people, animals, plants, food, cars, shops and all the things
around him.
Does he need your help?2.9 He learns how to think and solve problems, eg how to get the ball down from the
roof.
Does he need your help?2.10 He learns about colours - red, blue, green, yellow.
Does he need your help?

/2

-2-

- 2.11 He begins to learn about right and wrong.
Does he need your help?

- 3. Give 3 examples of pre-school activities:
.....
.....

- 4. Give 3 examples of themes to be used in the pre-school for weekly discussion:
.....
.....

- 5. Give 3 other examples of what can be done in a daily pre-school program:
.....
.....

- 6. What toys or objects can be provided to help the children learn about:
 - (a) Colours:
 - (b) Shapes:
 - (c) Sizes:

- 7. Describe what the following words mean and then translate them into Xhosa:
 - (a) Art:
.....
 - (b) Activities:
.....
 - (c) Blocks:
.....
 - (d) Books:
.....
 - (e) Community:
.....
 - (f) Describe:
.....
 - (g) Develop/Development:
.....

- (h) Discover:
.....
- (i) Educational toys:
.....
- (j) Emotions:
.....
- (k) First Aid Box:
.....
- (l) Image:
.....
- (m) Make-believe play:
.....
- (n) Observation:
.....
- (o) Play dough:
.....
- (p) Responsibility:
.....
- (q) Semicircle:
.....
- (r) Seldom:
.....

25th May 1984.

Observation Task.

Observe a child while he or she does an activity. Write down all the things you observe.

Child's Name

Child's Age

What activity was the child doing?

Did the child hold the crayon or brush easily in his fingers or did he hold it awkwardly or with his whole hand?

Did he use his right or left hand?

Did the child draw circles or objects you could recognise, or did he scribble?

Did the child cut with ease and did he hold the scissors in the correct way?

Which hand did he use?

What equipment or materials did you notice in the playroom and outside playground?

What toys are provided to help the children learn about colours, shapes and sizes?

What do you feel about the weeks programme set out for the children?

Describe what the following words mean, and then translate them into Xhosa.
ACTIVITIES. OBSERVATION

ART PLAY DOUGH

BLOCKS RESPONSIBILITY

BOOKS SEMICIRCLE

COMMUNITY SELDOM

DESCRIBE

DEVELOP/DEVELOPMENT

DISCOVER

EDUCATIONAL TOYS

EMOTIONS

FIRST AID BOX

IMAGE

MAKE-BELIEVE PLAY

OBSERVATION

State Name Date

Appendix C

List of Phambili Mawethu Educare Centres as at June 1986

Keiskammahoek District

(as provided by the co-ordinator on 4 June 1986)

The number used by the Directorate of Planning, Ciskei, for a village on their maps is indicated in the first column. The name of the Educare Centre follows in column 2, the number of children in column 3 and the name of the village if it differs from the name of the Educare Centre in column 4.

Village number	Name of educare centre	Number of children	Name of village if other than educare centre
01	Sivuyile	35	Keiskammahoek
01	S.S. Gida	22	Keiskammahoek
02	Emandlovini	40	Gwili-Gwili
02	Elaleni	57	Gwili-Gwili
02	Mnandi	66	Gwili-Gwili
02	Kwaqgabi	50	Gwili-Gwili
03	Rhabe	56	
03	Rhabe	70	
04	Cata 1	104	
04	Cata 2	39	
04	Cata 3	105	
05	Gxulu Lower	50	
06	Elukhanyweni	104	
06	Masinedane	65	Elukhanyweni
07	Burnshill	65	
08	Mnyameni 1	106	Lower Mnyameni
08	Mnyameni 2	150	Lower Mnyameni
09	Upper Ngqumeya 1	85	
09	Upper Ngqumeya 2	62	
10	Ngcamngā	99	Mbems
10	Ntabakandoda	25	Mbems
11	Tshoxa	66	
12	Ndlovini Upper	45	
12	Ndlovini Lower	60	
13	Upper Wolf River 1	72	Izingcuka
13	Upper Wolf River 2	65	Izingcuka
13	Upper Wolf River 3	50	Izingcuka
13	Upper Wolf River 4	55	Izingcuka
14	Ngxalawe 1	60	
14	Ngxalawe 2	35	
15	Noxolo	50	Lower Rabula
16	Ngobozana	65	
17	Mqukwane	45	Nqolo-Nqolo 2
18	Mnyameni 3	49	Upper Mnyameni
18	Mnyameni 4		Upper Mnyameni
19	Gxulu Upper	60	
21	Nqolo-Nqolo	54	
22	Madubela	45	
23	Ematolweni	29	Upper Rabula
24	Lenye	78	
25	Mthwaku	60	
26	Lower Wolf River 1	85	
26	Lower Wolf River 2	37	
26	Lower Wolf River 3	50	
27	New Rest	39	Upper Rabula 2
29	Lower Ngqumeya	55	
30	Siyalinga	65	Upper Rabula 3
34	Ngunxa	42	St Matthews
34	Nompha	35	St Matthews
36	Red Hill	25	
38	Peter's Farm	33	
42	Magcumeni	40	
43	Dontsa	45	
44	Jara	23	
44	Gongqo	45	
45	Mangweni	55	
46	Bumbane	42	
47	Trust 15	50	
	TOTAL	3264	

Appendix D

CONSTITUTION OF THE PHAMBILI MAWETHU PROJECT

1. NAME

The name of the project is Phambili Mawethu Project hereinafter called the Project. The address is Keiskammahoek - Republic of Ciskei.

2. AIM

The promotion of integrated and multi-functional community development including interalia:

- * supplementary education and training
- * cultural and social aspects
- * health and welfare aspects
- * agriculture

The development programs must involve the local community at all times with the aim that the community will eventually assume full responsibility without outside assistance.

3. TRUSTEE

The Trustee of the project is Miesane (Incorporated association not for gain) hereinafter called the Trustee.

4. CORPORATE STATUS

The corporate status shall vest in the Trustee.

5. BOARD OF MANAGEMENT

5.1 The board shall consist of the members as outlined in clause 5.3.

5.2 Quorum

Seven members, of which one must represent the Trustee, will form a quorum.

5.3 Appointment of members to the board

The Trustee will, appoint two members representing the trustee and will call for nominations from the undermentioned interested parties and will appoint the members of the board.

Nominations from the Ciskei Government:

- 1 The department of Rural Development
- 1 The Directorate of Planning.
- 1 Nomination from the Local Department of Health
- 1 Nomination from the Local Department of Education.
- 1 Nomination from the Local Department of Agriculture.
- 1 Nomination from the Ciskei Government - Department of Youth Affairs.
- 1 Nomination from each Tribal Authority involved.

5.4 Office Bearers

5.4.1 Chairman

5.4.2 Vice Chairman

5.4.3 Secretary

The project manager shall act as ex-officio secretary. He or she may participate in all discussions but shall have no right to vote on resolutions before the board.

5.5 Election of Office Bearers

5.5.1 The Board will elect a chairman and a vice chairman for a term mentioned in section 5.6

5.5.2 In the absence of the Chairman and the Vice Chairman the Board or the Executive Committee shall appoint a temporary Chairman from the members present.

5.6 Term of office

The term of office is for such a period as determined by the Trustee.

5.7 Casual Vacancies

The trustee will fill vacancies after inviting nominations from the parties concerned.

5.8 Allowance

All Board Members shall render their services free of charge but shall be entitled to a travelling and subsistence allowance as approved by the Board of Management.

5.9 Powers and Duties of the board

5.9.1 Executive Committee

To elect an Executive Committee from members of the Board of Control in accordance with clause 6.1 and to delegate to the Executive Committee such powers as may be decided upon.

5.9.2 Estimates

To draw up the estimates of expenditure for the project iro each financial year and to incur expenditure within the limits of the estimates after it has been approved by the Trustee.

5.9.3 Organisation and Administration

To manage and control the administration of the project according to the requirements of the Trustee.

5.9.4 Personnel

To appoint and discharge staff and to determine their conditions of service and duties and to submit this to the Trustee for approval.

5.9.5 Administration of funds and Goods

To receive and administer all funds and/or goods, to negotiate loans and bonds, to invest, sell and buy with the approval of the Trustee.

5.9.6 Financial Statement and Annual Report.

To approve the annual financial statements and the annual report before submission to the Trustee.

6. EXECUTIVE COMMITTEE

6.1 Members

The executive committee shall be constituted by the Chairman and Vice-chairman of the Board plus three board members to be elected by the Board annually. Two members of the executive committee members are to represent the trustee.

6.2 Quorum

Any three members, of which one must be a Trustee representative, of the executive shall form a quorum.

6.3 Secretary

The Project Manager shall act as ex-officio secretary. He/She may participate in all discussions but shall have no right to vote.

6.4 Powers and Duties of the Executive

To manage and control the administration of the project according to the requirements of the Board.

7. MEETINGS

7.1 Board of Management

The Board shall meet at least twice per year.

7.2 Executive Meetings

The executive shall meet at least four times per year.

7.3 Special Meetings

Special meetings shall be convened by the chairman, or vice-chairman if the chairman is not available, or by the Trustee whenever it is deemed necessary or upon the request in writing of any five members of the Board giving the reason for and detail of the business to be transacted.

7.4 Voting

Voting shall be by the show of hands. The Chairman shall have a casting vote and the Trustee shall have the right of veto. In the event that the Trustee exercises its right to veto, a special Board meeting must be called at which meeting the Board will meet with the Executive Committee of the trustee. If no agreement can be reached on the matter(s) which lead to the veto by the Trustee representative, the trustee will either terminate its trusteeship of the project, or Clause 10 (Disestablishment) will be brought into effect.

7.5 Notice of meetings

Notice of ordinary, special or executive meetings shall be conveyed in writing to every member of the Board or Executive. Notice of the meeting shall be dispatched at least two weeks prior to the meeting. The agenda shall accompany this notice.

7.6 Minutes

Minutes shall be compiled by the secretary and dispatched to members within one month after the meeting. Minutes of meetings are approved at the next meeting and signed by the Chairman and Secretary.

8. FINANCES

8.1 The financial year shall be from 1st April to 31st March of the following year.

8.2 A banking account shall be opened at an approved Commercial Bank.

8.3 All monies shall be received on behalf of the project and paid into the project's account. Cheques, promisory notes and bills shall be signed by the project manager or a substitute appointed by the Board, and countersigned by another member of the executive committee appointed by the Board.

8.4 Before submitting the annual financial statements the project manager shall have the books audited by a recognized auditor appointed by the Board. Financial statements shall be submitted to the Board, and the Trustee.

9. ANNUAL REPORTS

The Board submit the following reports at the end of each financial year to the Trustee.

9.1 An annual report of activities.

9.2 An audited financial report.

10. DISESTABLISHMENT

Should the project be disestablished, the Trustee shall decide as to the disposal of all movable and immovable property of the project, with due consideration of the fact that the assets of the project were acquired for the benefit of the communities concerned.

11. LIMITS TO RIGHTS AND RESPONSIBILITIES

11.1 Membership of the Board does not give right to property, title, claim, donations or any privileges granted to the Board as such.

11.2 No Board Member shall have any financial obligations or responsibilities in connection with any claim or action arising from any cause whatsoever and brought against the Board, unless the cause of debt arises from any deliberate action or willful neglect of duty of such a Board member.

12. AMENDMENT OF THE CONSTITUTION

The constitution can only be amended at an annual general meeting by a two-third majority vote, subject to the approval of the Trustee.

Appendix E

TELEX

TO: RSA EMBASSY: BISHO
FOR ATTENTION OF MR A VENTER OF THE DEPARTMENT OF FOREIGN
AFFAIRS

FROM: MR S M NONGOGO, CEAP CO REPUBLIC OF CISKEI
DIRECTORATE OF PLANNING

Pursuant to the CEAP meeting of 24 July 1985, a meeting between Imfesane - Ciskei represented by Rev. Cloete Managing Director and Mr Rossouw, Director of Financial Administration and Mr Nongogo chaired by the Honourable the Deputy Minister of Rural Development, Ciskei was held. The following projects submitted by Imfesane Ciskei were approved for funding under aegis of CEAP:-

Locality of Project	Nature of Project	No to be employed	No of Days	Wages required
Ethembeni near Frankfort	Brickmaking Building, Painting	36	90	8 100,00
Mdantsane	Gardening for Children's Home	4	154	1 540,00
Khambashe	Repairing Dam	20	22	1 100,00
Dimbaza	Gardening at Workshop for Blind & Cripples	2	154	770,00
Mdantsane	Improvements at home cripples	20	66	3 300,00
Keiskammahoek	Handcraft	100	154	38 500,00
	Gardening	100	154	38 500,00
	<u>Pre-school training</u>	<u>60</u>	<u>154</u>	<u>23 100,00</u>
	Health care	50	154	19 250,00
Xhameni	Fencing, gardening, road work, planting trees	10	154	3 850,00
Potsdam	Fence and build on church site	10	60	1 500,00
	Labour cost for Ciskei			139 510,00
	15% for additional costs			20 927,00
	TOTAL			<u>160 437,00</u>

Additional capital cost of 15% of R20 927,00 is recommended.

The Imfesane - Ciskei will recover expenditure incurred directly from your department. It has further been recommended to advance the capital cost of R20 927.

Appendix F

OPERATION HUNGER FEEDING-SCHEME

Operation Hunger are supplying all the Pre-schools with food, as listed below:

<u>Pre-school</u>	<u>District</u>	<u>No</u>	<u>Mealie meal</u>	<u>Stew</u>
Emandlovini	Gwili-gwili	40	5	1
kwaGqabi	do	51	6	1
Elalini	do	40	6	1
Mnandi	do	66	8	2
Ngobozana	Keiskammahoek	65	8	2
Dontza	do	45	5	1
Mthwaku	do	55	6	1
Ndlovini Upper	do	45	6	1
Ndlovini Lower	do	65	8	2
Mqukwane	do	51	6	1
Ngolo-ngolo	do	54	6	1
Ngungxa	do	42	5	1
Sivuyile	do	35	4	1
Tshoxa	do	66	8	2
Ematolweni	do	29	4	1
Elukanyweni	do	104	13	2
Gxulu	do	50	6	1
Nompha	do	35	4	1
Ngxalawe	do	60	8	1
SS Gida	do	22	3	1/2
Mnyameni 1	do	106	13	3
Mnyameni 3	do	150	19	4
Cata 1	do	49	6	1
Cata 2	do	104	13	1
Cata 3	do	39	5	1
Masincedeni	do	65	8	2
Lower Wolf River	do	85	11	2
Lower Mqumaya	do	32	4	1
Burnshill	do	65	8	2
Upper Nqumeya 1	do	85	11	2
Upper Nqumeya 2	do	62	8	2
Lenye	do	78	10	2
Trust 15	Rabula	50	6	1
Jara	do	33	3	1/2
New Rest	do	35	4	1
Siyalinga	do	65	8	2
Gongqo	do	45	5	1
Maqumeni	do	40	5	1
Noxolo	do	50	6	1
Totals		2257	278	57
<u>Pre-school</u>	<u>District</u>	<u>No</u>	<u>Mealie meal</u>	<u>Stew</u>
Ndevana	Kambashe - Zwelitsha	94	12	2
Qongnota	do	88	11	2
Ethembeni	Manyano - Zwelitsha	47	6	1
Frankfort	do	68	8	2
Mqwalanaa	Zibi - Middledrift	100	12	2
Lower Regu	do	80	10	2
Perksdale Farm	do	55	6	1
Mayipase	do	73	9	2
Mnyameni	do	178	17	3
Gabe Debe	Zwelitsha	55	7	1
Mncamnga	do	55	7	1
Mapaka	do	55	7	1
Totals		908	112	20

Appendix G

QUESTIONNAIRE FOR SUPERVISORS

AT EDUCARE CENTRES OF THE PHAMBILI MAWETHU PROJECT

To answer many of the questions, you need only put a X in a box. This will make the job quicker. But, please make sure you put your X IN the box, like this:

Yes No or Yes No

To answer other questions, you might have to write a few words. Thank you for your help.

- 1 Name of Supervisor: Miss/Mrs
- 2 Name of centre:
- 3 Address:
- 4 Date of opening
- 5 How many people from the community help you as
 Assistant Cook Gardener
- 6 How old are you? 20-24 25-29 30-34 35-39
 40-44 45-49 over 50 over 60
- 7 How many children of your own do you have?
 0 1 2 3 4 5 6 7 8 9 10 more than 10
- 8 What was the highest school standard you reached?
 Standard: 2 3 4 5 6 7 8 9 10
- 9 What year did you leave school?
- 10 If you did any training between leaving school and becoming a supervisor of an Educare Centre, put a X in the right box.
 Typing Nursing Teaching Bookkeeping Other
 If you have marked this last box, please give more details:
- 11 What kinds of jobs have you had since leaving school?

- 12 Tell me about your language knowledge

	Very well	Well	Average	Poorly
English: Speak				
Write and read				
Mother Tongue: Speak				
Write and read				
- 13 How long has your centre been in operation?

-2-

- 14 Have you had any training for Educare? Yes No
 How many times have you attended the fortnightly in-service-training?
- 15 Do you learn something new every time you attend? Yes No
- 16 Are you taught to make your own equipment? Yes No
- 17 How many children attended your centre in
 1984 1985 1986
- 18 Can you explain the changes, if any?
- 19 What is the average attendance each day this year?
- 20 In what kind of building do you work? hut room
 house community centre other If you have marked this last box, please give more details:
- 21 Write down the number of children in each year group in your centre at present (July 1986)

	under 2	2	3	4	5	6	over 6 yrs	Total
Boys								
Girls								
Total								
- 22 How does the community support the centre? Building
 Vegetable garden Financially Cooking utensils
 Other If you have marked this last box, please give more details:
- 23 How much do parents pay per month?
- 24 Should they pay more? Yes No
- 25 What is the money used for?

- 26 What equipment is available? Inside: Blocks Books
 Toys Educational toys Music Fantasy Paint
 Crayons Glue Scissors Magazines for cutting
 Waste Puzzles Clay Nature Table Other If you
 have marked this last box, please give more details:

 Outside: Sand pit Water play Tyres Balancing
 Balls Bean bags Rope for swinging Other If you
 have marked this last box, please give more details:

- 27 Are the articles you have marked above in question 26 used
 every day once a month seldomly never?
- 28 Of the equipment listed in Question 26, which you do NOT
 have in you centre, what is the kind you would MOST like to
 have?

- 29 Is there any other equipment, not on the list in Question
 26, which you would like to have? List it here:

- 30 How would you make use of any equipment you have listed in
 answer to questions 28 and 29?

- 31 Do you make any equipment yourself? Yes No
 If yes, give examples:
- 32 Do you use any equipment found around the
 centre, for example stones for counting? Yes No
 Give examples:.....
- 33 Apart from equipment for the children to use, what other
things would you most like to have for you Educare centre?

- 34 Outline your daily timetable. Give an idea of how long you
 spend on each activity

- 35 Why did you want to become an Educare Supervisor?

- 36 How many of the children knew you before they started
 coming to the Educare Centre?

- 37 What would you say are the most important reasons for the
parents of your pupils sending their children to your
 Educare Centre? Give no more than three reasons and put a
 tick (✓) next to the most important reason.

- 38 What would you say is the most important thing an Educare
 Centre does for the pupils?

Keiskammahoek Educare Centres

Name of Centre: No. of children:.....

Check list of materials available and activities

Materials	How many	Enough		Used Daily	Used Twice a week	Used Once a week	Used Once a month	Never Used
		Yes	No					
Paint & brushes								
Crayons								
Clay	-							
Scissors								
Waste	-							
Puzzles								
Picture books								
Drawing paper	-							
Blocks								
Educational toys								
Dolls								
Toy cars								
Balls								
Bean bags								
Drums(tins)								
Shakers								
Activities								
Stories told								
Stories read								
Stories illustrated								
Recitations								
Counting								
Alphabet								
Xhosa songs								
English songs								
Colours (identify)								
Shapes								

.....
Supervisor

.....
Date

Appendix I

QUESTIONNAIRE TO OBTAIN INFORMATION ABOUT THE BACKGROUND OF A SAMPLE OF CHILDREN ATTENDING EDUCARE CENTRES IN KEISKAMMAHOEK

To answer many of the questions, you need only put a x in a box. Please make sure that you put your x IN the right box like this:

Yes No

- 1 Name of child Male Female
- 2 Date and place of birth
- 3 Name of Educare Centre
Name of village
- 4 Father's occupation
- 5 Is the father living with the family? Yes No
- 6 If the father works away from home, for what period of time is he absent?
 1 week 1 month 3 months 6 months 1 year longer
- 7 What is the educational level of the father?
 No school Std 1 Std 2 Std 3 Std 4 Std 5
 Std 6 Std 7 Std 8 Std 9 Std 10 Post-matric
- 8 Mother's occupation
- 9 Does the mother stay with the family? Yes No
- 10 If the mother works away from home, for what period of time is she absent?
 1 week 1 month 3 months 6 months 1 year longer
- 11 What is the educational level of the mother?
 No school Std 1 Std 2 Std 3 Std 4 Std 5
 Std 6 Std 7 Std 8 Std 9 Std 10 Post-matric
- 12 If both the mother and the father work away from home, who takes care of the child?
 grandparents grandmother aunt/relatives
 older brother older sister friend
- 13 Total number of children in the family:
 1 2 3 4 5 6 7 8 9 10 11 12
- 14 Birth order of child:
 1 2 3 4 5 6 7 8 9 10 11 12
- 15 How many people normally sleep in the home every night?

16 Father a churchmember Yes No Denomination:

17 Mother a churchmember Yes No Denomination:

18 Period of residence of parents in Keiskammahok in years

0-1 1-2 2-5 5-10 10-20 20+

19 Resettled Yes No From where:

20 How does child get to Educare Centre?

on own brought by mother/grandmother/relative

friends also coming to centre

21 Do the parents pay a monthly fee? Yes No How much?

22 Which of the following are found in the home:

magazines picture books radio TV

home made toys bought toys

.....
SUPERVISOR

.....
DATE

Appendix J

QUESTIONNAIRE FOR SUB A TEACHERS
IN A SAMPLE OF SCHOOLS IN KEISKAMMAHOEK

- 1 Name of school:
- 2 Name of teacher:
- 3 Professional qualifications:
- 4 Years experience in Sub A:
- Total number of years of experience

5 Age of pupils in years and months at the beginning of the year: How many were:

4	4:6	5	5:6	6	6:6	7	7:6	Total

- 6 How many pupils in your class last year
 - (a) attended an Educare centre for a full year . . .
 - (b) attended an Educare centre for 6 months or less . . .
 - (c) did not attend an Educare centre . . .
 - Total . . .

7 Name of Educare centre attended

- 8 Was there a noticeable difference between groups (a) and (c)
 - in small muscle control (handling of writing materials) Yes No
 - motivation and interest in their work Yes No
 - perseverance and concentration Yes No
 - emotional/social adaptation Yes No

9 What problems do schoolbeginners in your school experience?

10 Do you experience more problems with the very young pupils?
 Yes No

-2-

11 What school entrance age do you advise?

.

12 From your experience what are the reasons for failure at the end of Sub A?

.

.

.

13 What would you suggest the Educare centres should concentrate on in preparing the child for school?

.

.

.

.

.

.

.

14 Would you suggest liaison between supervisors of Educare centres and Sub A teachers? (Motivate) Yes No

.

.

.

Please add any other ideas or suggestions you would like to make.

.....
Teacher

.....
Date

APPENDIX K

RATING SCALE REGARDING CERTAIN ASPECTS OF
A SAMPLE OF SCHOOL BEGINNERS' BEHAVIOUR

FEBRUARY 1987

- 1 Name of school
 - 2 Name of child Sex
 - 3 Date of birth Age . . yrs . . mths
 - 4 Did he attend any organised preschool activity?
-

Instructions to class teachers:

A rating scale ranging from 1 to 5 is provided with every item. Please rate the pupil's performance according to your observations in class by making a cross on the figure that best describes his behaviour. The key is as follows:

- | | | | | |
|-----------|------------|-------------|---------|-----------|
| 1 Never | 2 Seldomly | 3 Sometimes | 4 Often | 5 Always |
| Very weak | Weak | Average | Good | Very Good |

Regarding language and verbal ability, associative memory and linguistic comprehension and expression:

- 1 Does he listen meaningfully and attentively to stories? 1 2 3 4 5
- 2 Can he answer a few questions on a story after listening to it? 1 2 3 4 5
- 3 Does he understand commands; Can he for instance carry out 3 instructions in the correct order? . . 1 2 3 4 5
- 4 Can he without difficulty retell stories in sequence? 1 2 3 4 5

Regarding social and emotional participation:

- 5 Does he communicate freely with adults? 1 2 3 4 5
- 6 Does he approach other children easily? 1 2 3 4 5
- 7 Is he willing to assist other children? 1 2 3 4 5
- 8 Does he adapt himself within a group, share the attention of the teacher with the rest of the class and wait for his turn? 1 2 3 4 5
- 9 In his reaction to difficulties, does he work out things for himself without asking for assistance and relying on help excessively; does he show perseverance and maintain his effort? 1 2 3 4 5
- 10 Is he able to sit still and attend on command of the teacher and concentrate for a considerable time? 1 2 3 4 5

.....
Teacher

.....
Date

Appendix L

RESULTS: ABRIDGED ASB AND ASB TEST 6
SAMPLE OF SCHOOLBEGINNERS, KRISKANNAHOEK, 1987

Pupil	Sex	Age	Sch	Exp	Raw Scores				Staves			Abridged A S B Total Stave	Test 6 scores Raw Stave		
					3	4	5	total	3	4	5				
					[10]	[10]	[100]	[120]	[5]	[5]	[5]			[15]	[5]
1	F	5/03	1	1	3	7	34	44	2	4	3	9	3	24	4
2	F	5/03	1	2	5	5	31	41	2	3	3	8	3	24	4
3	F	5/04	1	1	1	6	37	44	1	3	3	7	2	20	3
4	F	5/04	1	2	3	2	13	18	2	2	2	6	2	12	2
5	F	5/04	1	1	3	4	23	30	2	3	2	7	2	26	4
6	F	5/04	1	2	5	3	16	24	2	2	2	6	2	16	3
7	M	5/05	1	1	6	4	20	30	3	3	2	8	3	14	3
8	M	5/05	1	2	7	4	10	21	3	3	1	7	2	19	3
9	M	5/07	1	1	2	6	75	83	1	3	4	8	3	29	5
10	M	5/06	1	2	4	4	3	11	2	3	1	6	2	19	3
11	F	5/07	1	1	5	1	7	13	2	1	1	4	1	10	2
12	F	5/09	1	2	3	1	9	13	2	1	1	4	1	10	2
13	F	6/00	1	1	4	2	8	14	2	2	1	5	2	11	2
14	F	5/10	1	2	5	5	23	33	2	3	2	7	2	16	3
15	M	6/03	1	1	2	5	12	19	1	3	2	6	2	24	4
16	M	6/02	1	2	3	1	27	31	2	1	2	5	2	8	2
17	M	6/04	1	1	5	3	30	38	2	2	3	7	2	18	3
18	M	6/04	1	2	5	3	10	18	2	2	1	5	2	13	2
19	M	6/07	1	1	8	3	24	35	3	2	2	7	2	22	4
20	M	6/06	1	2	7	8	37	52	3	4	3	10	3	20	3
21	F	7/04	1	1	1	3	23	27	1	2	2	5	2	21	3
22	F	7/04	1	2	8	7	36	51	3	4	3	10	3	21	3
23	M	7/05	1	1	1	4	10	15	1	3	1	5	2	11	2
24	M	7/06	1	2	7	9	95	111	3	5	5	13	4	28	5
25	F	5/11	4	1	2	1	0	3	1	1	1	3	1	0	1
26	F	5/11	2	2	4	2	9	15	2	2	1	5	2	4	2
27	M	5/11	2	1	4	3	7	14	2	2	1	5	2	11	2
28	M	6/01	2	2	2	1	0	3	1	1	1	3	1	14	3
29	M	6/01	2	1	9	4	39	52	4	3	3	10	3	20	3
30	M	5/11	2	2	8	6	35	49	3	3	3	9	3	19	3
31	F	6/00	2	1	4	2	19	25	2	2	2	6	2	9	2
32	F	6/00	2	2	5	3	37	45	2	2	3	7	2	24	4
33	M	6/03	2	1	3	2	45	50	2	2	3	7	2	6	2
34	M	6/03	2	2	4	2	56	62	2	2	3	7	2	14	3
35	M	6/04	1	1	7	6	39	52	3	3	3	9	3	14	3
36	M	6/07	2	2	7	3	46	56	3	2	3	8	3	5	2
37	F	6/05	2	1	8	6	45	59	3	3	3	9	3	18	3
38	F	5/07	7	2	9	4	19	32	4	3	2	9	3	15	3
39	M	6/08	2	1	1	3	0	4	1	2	1	4	1	3	2
40	M	6/08	2	2	9	9	71	89	4	5	4	13	4	24	4
41	M	6/08	2	1	7	2	64	73	3	2	3	8	3	27	4
42	M	6/10	2	2	5	3	45	53	2	2	3	7	2	25	4
43	F	7/00	4	1	5	4	25	34	2	3	2	7	2	11	2
44	F	6/11	2	2	5	8	65	78	2	4	3	9	3	15	3
45	M	7/06	2	1	3	3	25	31	2	2	2	6	2	13	2
46	M	7/06	2	2	4	5	17	26	2	3	2	7	2	19	3
47	M	7/06	2	1	4	1	29	34	2	1	2	5	2	12	2
48	M	7/07	6	2	5	2	31	38	2	2	3	7	2	8	2
49	M	5/03	3	1	2	0	29	31	1	1	2	4	1	23	4
50	M	5/03	1	2	3	4	63	70	2	3	3	8	3	26	4

Pupil	Sex	Age	Sch	Exp	Raw Scores				Staves			Abridged A S B Total Stave	Test 6 scores Raw Stave		
					3	4	5	total	3	4	5				
					[10]	[10]	[100]	[120]	[5]	[5]	[5]			[15]	[5]
51	M	5/04	3	1	2	3	3	8	1	2	1	4	1	28	5
52	M	5/04	1	2	1	3	27	31	1	2	2	5	2	9	2
53	M	5/06	3	1	0	0	9	9	1	1	1	3	1	21	3
54	M	5/04	1	2	9	5	56	70	4	3	3	10	3	27	4
55	F	5/11	3	1	3	1	4	8	2	1	1	4	1	12	2
56	F	5/11	1	2	9	5	25	39	4	3	2	9	3	26	4
57	M	6/00	3	1	1	1	3	5	1	1	1	3	1	21	3
58	M	5/10	3	2	3	5	11	19	2	3	2	7	2	6	2
59	M	6/00	5	1	4	2	29	35	2	2	2	6	2	12	2
60	M	6/01	3	2	10	7	95	112	5	4	5	14	5	27	4
61	M	6/00	3	1	1	1	3	5	1	1	1	3	1	18	3
62	M	6/02	3	2	1	2	39	42	1	2	3	6	2	16	3
63	M	6/08	3	1	4	3	48	55	2	2	3	7	2	18	3
64	M	6/09	3	2	2	3	15	20	1	2	2	5	2	15	3
65	F	7/00	3	1	3	3	13	19	2	2	2	6	2	13	2
66	F	6/09	3	2	2	2	34	38	1	2	3	6	2	20	3
67	M	7/00	3	1	2	0	2	4	1	1	1	3	1	24	4
68	M	6/10	3	2	5	2	26	33	2	2	2	6	2	16	3
69	M	5/02	4	1	1	0	4	5	1	1	1	3	1	0	1
70	M	5/02	1	2	5	3	24	32	2	2	2	6	2	14	3
71	F	5/03	4	1	7	4	40	51	3	3	3	9	3	9	2
72	F	5/02	7	2	0	1	7	8	1	1	1	3	1	6	2
73	F	5/04	4	1	2	0	2	4	1	1	1	3	1	0	1
74	F	5/03	7	2	8	3	1	12	3	2	1	6	2	5	2
75	F	5/05	4	1	0	1	0	1	1	1	1	3	1	0	1
76	F	5/04	1	2	7	6	62	75	3	3	3	9	3	28	5
77	F	5/04	4	1	0	1	2	3	1	1	1	3	1	7	2
78	F	5/05	7	2	2	0	0	2	1	1	1	3	1	0	1
79	F	5/05	4	1	0	1	1	2	1	1	1	3	1	0	1
80	F	5/05	4	2	2	0	2	4	1	1	1	3	1	0	1
81	F	5/08	4	1	5	4	2	11	2	3	1	6	2	11	2
82	F	5/08	4	2	2	0	6	8	1	1	1	3	1	0	1
83	M	5/09	4	1	6	5	13	24	3	3	2	8	3	5	2
84	M	5/10	7	2	7	6	2	15	3	3	1	7	2	22	4
85	F	6/01	4	1	2	4	24	30	1	3	2	6	2	13	2
86	F	6/01	1	2	3	5	68	76	2	3	3	8	3	28	5
87	F	5/03	5	1	2	1	7	10	1	1	1	3	1	12	2
88	F	5/02	7	2	2	5	14	21	1	3	2	6	2	5	2
89	F	5/11	5	1	2	2	24	28	1	2	2	5	2	14	3
90	F	6/00	7	2	0	4	13	17	1	3	2	6	2	5	2
91	F	5/11	5	1	7	5	48	60	3	3	3	9	3	20	3
92	F	6/00	7	2	1	0	0	1	1	1	1	3	1	4	2
93	F	6/03	5	1	2	4	16	22	1	3	2	6	2	17	3
94	F	6/04	7	2	2	2	4	8	1	2	1	4	1	11	2
95	F	6/06	5	1	7	3	35	45	3	2	3	8	3	17	3
96	F	6/07	7	2	2	3	0	5	1	2	1	4	1	8	2
97	M	6/03	5	1	6	3	19	28	3	2	2	7	2	8	2
98	M	6/02	6	2	7	1	37	45	3	1	3	7	2	21	3
99	F	6/08	6	1	8	7	56	71	3	4	3	10	3	24	4
100	F	6/09	6	2	7	6	54	67	3	3	3	9	3	20	3
101	M	6/08	6	1	6	3	27	36	3	2	2	7	2	14	3
102	M	6/09	6	2	3	2	18	23	2	2	2	6	2	6	2
103	F	6/11	6	1	2	1	18	21	1	1	2	4	1	7	2
104	F	6/08	6	2	5	2	39	46	2	2	3	7	2	21	3
105	M	7/08	4	1	4	4	44	52	2	3	3	8	3	25	4
106	M	7/10	6	2	1	0	4	5	1	1	1	3	1	0	1

Pupil	Sex	Age	Sch	Exp	Raw Scores				Staves			Abbreviated		Test 6	
					Tests				Tests			A S B		scores	
					3	4	5	To- tal	3	4	5	Total	Stave	Raw	Stave
[10]	[10]	[100]	[120]	[5]	[5]	[5]	[15]	[5]	[30]	[5]					
107	M	5/05	1	2	6	3	9	18	3	2	1	6	2	17	3
108	F	5/08	4	1	1	2	0	3	1	2	1	4	1	0	1
109	F	5/08	4	1	2	4	27	33	1	3	2	6	2	19	3
110	M	5/09	3	2	7	5	37	49	3	3	3	9	3	26	4
111	F	6/03	2	1	4	3	3	10	2	2	1	5	2	0	1
112	M	6/04	7	1	6	4	22	32	3	3	2	8	3	10	2
113	F	6/11	1	2	2	3	15	20	1	2	2	5	2	20	3
114	M	7/03	5	1	8	4	29	41	3	3	2	8	3	26	4
115	M	7/03	5	1	4	4	51	59	2	3	3	8	3	27	4
116	F	7/06	1	1	4	5	27	36	2	3	2	7	2	16	3
117	F	7/06	4	1	6	6	47	59	3	3	3	9	3	22	4
118	F	5/04	1	1	0	0	0	0	1	1	1	3	1	-	-
119	F	5/04	1	1	0	0	0	0	1	1	1	3	1	-	-
120	M	5/04	1	1	1	0	0	1	1	1	1	3	1	-	-
121	F	5/08	3	1	0	0	0	0	1	1	1	3	1	-	-
122	F	5/08	3	2	0	0	0	0	1	1	1	3	1	-	-
123	M	5/08	3	1	0	0	0	0	1	1	1	3	1	-	-
124	M	6/00	3	1	0	0	0	0	1	1	1	3	1	-	-
125	F	6/00	1	1	0	0	0	0	1	1	1	3	1	-	-
126	F	6/02	5	1	0	0	0	0	1	1	1	3	1	-	-
127	F	7/00	1	1	0	0	0	0	1	1	1	3	1	-	-
128	F	5/05	7	3	8	3	24	35	3	2	2	7	2	12	2
129	F	5/11	7	3	8	2	23	33	3	2	2	7	2	4	2
130	M	6/05	7	3	9	4	29	42	4	3	2	9	3	12	2
131	F	6/05	7	3	2	2	1	5	1	2	1	4	1	9	2
132	M	6/06	7	3	4	3	0	7	2	2	1	5	2	9	2
133	F	6/07	7	3	0	3	8	11	1	2	1	4	1	12	2
134	M	6/10	7	3	1	6	9	16	1	3	1	5	2	21	3
135	F	6/10	7	3	3	3	0	6	2	2	1	5	2	6	2
136	F	6/10	7	3	2	3	0	5	1	2	1	4	1	2	1
137	F	6/11	7	3	6	6	2	14	3	3	1	7	2	4	2
138	M	6/11	7	3	3	0	21	24	2	1	2	5	2	4	2
139	F	7/00	7	3	9	7	78	94	4	4	4	12	4	20	3
140	M	7/00	7	3	9	9	53	71	4	5	3	12	4	22	4

Abbreviations:

Sch = school

Exp = exposure:-
1: had been to an Educare Centre
2: had not been to an Educare Centre
3: attended Sub A the previous year
but were not registered

[] = maximum scores

- = did not take the test

Notes:

Pupils 107 - 117 were not matched due to absenteeism and other factors. Their results were incorporated in the broad analysis of school beginners, where attendance or non-attendance of an Educare Centre was not a consideration.

Pupils 118 - 127 could not handle the Abbreviated ASB Test at all and were excused when test 6 was administered.

Pupils 128 - 140 attended Sub A in 1986 without being registered and were only officially enrolled in 1987.

Appendix M

Scores on 10 items regarding school beginners socio-emotional behaviour

Pupil	Sex	Age	Sch	Exp	1 [5]	2 [5]	3 [5]	4 [5]	5 [5]	6 [5]	7 [5]	8 [5]	9 [5]	10 [5]	Total [50]
1	F	5/03	1	1	4	4	3	3	3	4	4	3	3	3	34
2	F	5/03	1	2	4	4	4	4	3	4	4	4	3	4	38
3	F	5/04	1	1	4	3	3	2	2	2	4	4	5	3	32
4	F	5/04	1	2	4	3	3	3	3	3	3	4	3	4	33
5	F	5/04	1	1	4	3	3	3	3	3	3	4	3	4	33
6	F	5/04	1	2	3	3	3	3	3	3	3	4	3	3	31
7	M	5/05	1	1	4	4	3	4	5	4	3	4	4	4	39
8	M	5/05	1	2	2	2	2	2	2	3	3	3	2	3	24
9	M	5/07	1	1	4	3	3	3	3	3	3	4	3	4	33
10	M	5/06	1	2	4	3	3	3	3	3	3	3	3	4	32
11	F	5/07	1	1	4	4	3	4	2	2	3	3	5	3	33
12	F	5/09	1	2	4	4	3	3	4	4	4	4	5	4	39
13	F	6/00	1	1	4	4	3	3	3	4	4	4	3	4	36
14	F	5/10	1	2	4	4	4	4	3	4	4	4	4	4	39
15	M	6/03	1	1	5	4	3	4	5	4	4	5	4	4	42
16	M	6/02	1	2	2	3	2	2	3	3	2	4	3	3	27
17	M	6/04	1	1	3	2	2	2	2	3	3	3	2	3	25
18	M	6/04	1	2	5	4	3	4	3	2	2	4	2	4	33
19	M	6/07	1	1	3	3	3	3	3	3	3	3	3	3	30
20	M	6/06	1	2	5	3	2	4	4	3	5	4	3	4	37
21	F	7/04	1	1	4	4	4	3	3	4	4	4	3	4	37
22	F	7/04	1	2	5	5	5	4	5	4	4	4	4	5	45
23	M	7/05	1	1	4	3	3	3	2	4	4	3	2	3	31
24	M	7/06	1	2	4	4	4	4	3	4	4	4	4	4	39
25	F	5/11	4	1	3	3	2	3	3	3	3	3	3	3	29
26	F	5/11	2	2	3	2	3	1	2	3	2	2	2	3	23
27	M	5/11	2	1	3	3	3	2	2	3	3	3	3	3	28
28	M	6/01	2	2	1	1	1	1	1	2	1	1	1	1	11
29	M	6/01	2	1	3	3	4	3	5	4	4	4	3	4	37
30	M	5/11	2	2	5	5	5	5	5	5	4	5	5	5	49
31	F	6/00	2	1	2	2	3	2	3	3	2	2	3	4	26
32	F	6/00	2	2	3	4	3	3	4	4	3	4	4	3	35
33	M	6/03	2	1	2	2	3	2	3	3	4	4	4	4	31
34	M	6/03	2	2	3	4	3	2	3	4	4	4	4	3	34
35	M	6/04	1	1	5	5	5	4	4	4	5	4	4	4	44
36	M	6/07	2	2	5	4	4	4	5	5	5	4	5	5	46
37	F	6/05	2	1	4	5	4	4	4	5	5	4	2	2	39
38	F	6/07	7	2	4	4	4	2	4	4	4	4	5	5	40
39	N	6/08	2	1	2	2	2	2	3	3	1	3	2	3	23
40	M	6/08	2	2	4	4	5	4	5	4	4	4	4	3	41
41	M	6/08	2	1	5	5	5	4	5	5	4	5	5	5	48
42	M	6/10	2	2	3	3	2	2	3	3	2	2	2	3	25
43	F	7/00	4	1	5	4	5	4	4	4	3	4	3	4	40
44	F	6/11	2	2	5	5	5	4	5	5	4	5	5	5	48
45	M	7/06	2	1	2	3	2	2	2	2	3	3	3	3	25
46	M	7/06	2	2	5	4	5	4	5	5	5	4	4	5	46
47	M	7/06	2	1	4	3	3	2	3	2	3	2	3	4	29
48	M	7/07	6	2	2	1	1	2	2	2	1	1	1	2	15
49	M	5/03	3	1	3	3	1	1	4	3	3	3	4	2	27
50	M	5/03	1	2	4	4	4	4	3	4	4	4	4	4	39

Pupil	Sex	Age	Sch	Exp	1 [5]	2 [5]	3 [5]	4 [5]	5 [5]	6 [5]	7 [5]	8 [5]	9 [5]	10 [5]	Total [50]
51	M	5/04	3	1	3	3	3	3	4	4	4	3	4	4	35
52	M	5/04	1	2	4	3	3	4	4	2	4	2	4	5	35
53	M	5/06	3	1	3	3	3	3	4	3	3	3	3	3	31
54	M	5/04	1	2	5	5	3	4	3	4	3	4	3	4	38
55	F	5/11	3	1											-
56	F	5/11	1	2	4	4	4	4	3	4	4	4	4	4	39
57	M	6/00	3	1	2	3	2	3	3	3	3	3	3	3	28
58	M	5/10	3	2	3	3	2	2	3	3	2	3	2	4	27
59	M	6/00	5	1	2	2	2	3	3	3	3	2	2	3	25
60	M	6/01	3	2	5	4	5	4	4	4	4	4	4	5	43
61	M	6/00	3	1	2	3	3	2	4	3	3	3	3	2	28
62	M	6/02	3	2	2	2	3	2	4	4	4	3	3	1	28
63	M	6/08	3	1	3	3	3	2	4	4	3	2	2	4	30
64	M	6/09	3	2	4	4	3	3	4	4	3	3	3	4	35
65	F	7/00	3	1	3	4	4	3	4	4	3	3	3	3	34
66	F	6/09	3	2	4	4	3	3	3	3	3	4	3	4	34
67	M	7/00	3	1	4	3	4	3	4	4	3	1	4	1	31
68	M	6/10	3	2	3	3	2	1	4	3	3	3	3	1	26
69	M	5/02	4	1	3	4	3	3	3	3	3	4	4	4	34
70	M	5/02	1	2	4	3	2	3	3	2	2	2	3	4	28
71	F	5/03	4	1	5	5	5	5	5	5	5	5	5	5	50
72	F	5/02	7	2	2	1	3	2	3	2	1	3	2	2	21
73	F	5/04	4	1	3	3	3	3	3	3	3	3	3	4	31
74	F	5/03	7	2	3	4	4	4	4	4	4	3	4	3	37
75	F	5/05	4	1	3	3	3	3	3	3	3	3	3	3	30
76	F	5/04	1	2	4	4	4	3	3	4	4	4	3	4	37
77	F	5/04	4	1	2	2	2	2	2	3	2	3	3	3	24
78	F	5/05	7	2	3	3	2	2	3	3	4	2	3	4	29
79	F	5/05	4	1	3	4	3	3	3	3	3	4	3	3	31
80	F	5/05	4	2	3	3	3	3	3	4	4	4	4	4	35
81	F	5/08	4	1	5	5	5	5	5	5	5	5	5	5	50
82	F	5/08	4	2	3	3	3	3	3	3	3	3	3	3	30
83	M	5/09	4	1	2	3	3	2	3	3	3	3	3	3	28
84	M	5/10	7	2	3	4	3	3	2	3	3	2	2	2	27
85	F	6/01	4	1	5	5	5	5	5	4	4	5	5	3	46
86	F	6/01	1	2	4	5	3	4	2	3	3	4	3	5	36
87	F	5/03	5	1	3	3	3	3	3	3	3	3	3	3	30
88	F	5/02	7	2	1	2	3	3	3	2	2	3	3	2	24
89	F	5/11	5	1	2	1	2	2	3	2	2	2	2	3	21
90	F	6/00	7	2	3	2	3	3	3	3	3	3	3	2	28
91	F	5/11	5	1	3	3	3	4	4	3	4	3	3	4	34
92	F	6/00	7	2	2	2	1	1	2	3	3	1	1	1	17
93	F	6/03	5	1	3	2	3	3	3	3	3	3	2	3	28
94	F	6/04	7	2	5	3	3	3	4	4	4	2	3	3	29
95	F	6/06	5	1	3	3	3	2	2	3	3	3	3	3	28
96	F	6/07	7	2	3	3	2	2	3	3	2	1	3	4	26
97	M	6/03	5	1	2	2	2	2	3	2	2	2	3	3	23
98	M	6/02	6	2	2	2	3	2	3	3	2	3	2	3	25
99	F	6/08	6	1	4	4	4	3	3	4	4	4	3	2	35
100	F	6/09	6	2	3	3	3	3	3	3	3	3	3	3	30
101	M	6/08	6	1	5	4	4	4	5	5	4	4	4	3	42
102	M	6/09	6	2	2	3	2	2	3	3	3	2	3	2	25
103	F	6/11	6	1	3	3	3	2	2	3	3	3	2	3	27
104	F	6/08	6	2	3	3	3	3	3	4	3	3	3	3	31
105	M	7/06	4	1	5	5	5	5	4	4	4	4	4	5	45
106	M	7/10	6	2	3	3	2	2	3	3	3	2	3	3	27

Pupil	Sex	Age	Sch	Exp	1	2	3	4	5	6	7	8	9	10	Total
					[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[50]
107	M	5/05	1	2	3	3	4	4	3	4	4	2	4	5	36
108	F	5/08	4	1	4	4	4	4	4	4	4	4	4	4	40
109	F	5/08	4	1	3	4	3	4	3	3	3	3	4	4	34
110	M	5/09	3	2	4	4	4	3	5	5	4	4	3	4	40
111	F	6/03	2	1	3	3	4	3	4	3	4	3	4	4	35
112	M	6/04	7	1	3	4	4	2	3	4	4	2	2	2	30
113	F	6/11	1	2	5	4	5	3	5	3	5	5	5	5	45
114	M	7/03	5	1	3	3	3	3	3	3	4	3	3	3	31
115	M	7/03	5	1	3	3	3	3	3	3	3	3	3	3	30
116	F	7/06	1	1	5	4	5	3	5	3	3	3	2	4	37
117	F	7/06	4	1	5	5	5	5	5	5	5	5	5	5	50
118	F	5/04	1	1	3	2	2	2	2	3	3	4	2	4	27
119	F	5/04	1	1	3	2	2	2	2	3	3	3	2	3	25
120	M	5/04	1	1	2	2	2	1	2	2	2	2	1	2	18
121	F	5/08	3	1	3	3	3	2	4	4	4	4	3	4	34
122	F	5/08	3	2	4	3	3	3	3	4	3	3	3	3	32
123	M	5/08	3	1	3	4	3	2	3	3	3	3	3	3	30
124	M	6/00	3	1	2	3	3	2	3	2	3	3	3	3	27
125	F	6/00	1	1	2	3	2	2	3	5	4	2	1	1	25
126	F	6/02	5	1	1	1	1	1	3	2	2	1	1	1	14
127	F	7/00	1	1	1	1	1	1	1	2	2	1	1	1	12

Abbreviations:

Sch = school
 Exp = exposure (1: attended educare centre; 2: did not.)
 [] = maximum scores
 - = not scored by teacher

Notes:

Pupils 107 - 117 were not matched due to absenteeism and other factors. Their results can be incorporated in an analysis of the sample as such where matched pairs are not considered.

Pupils 118 - 127 could not handle the ASB test at all and were excused when the test was being taken.

1

The supervisor at a
traditional hut at
Lower Mnyameni 2



2

A newly constructed
Educare Centre at
Lower Mnyameni made
of poles and mud



3

A picturesque setting
for an Educare Centre
at Lower Wolf River 1



4

A pole and mud structure with corrugated iron roof at Masincedane



5

Prefabricated wooden structures utilised as an Educare Centre at Lower Wolf River no 1



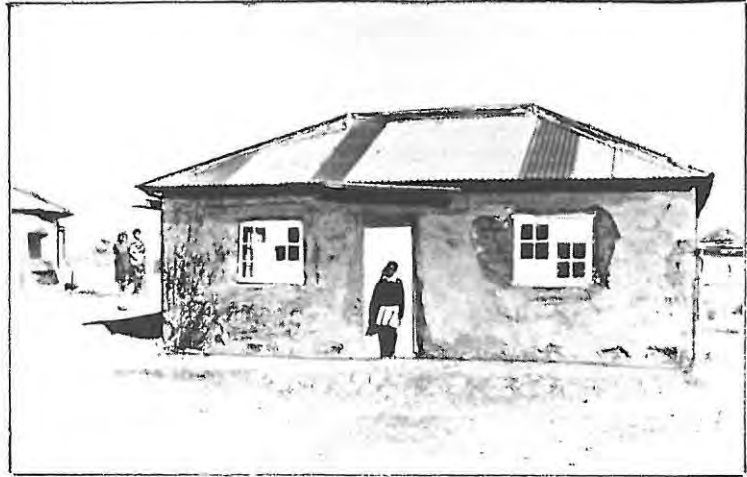
6

A solid house in Upper Gxulu formerly used by the Dept of Forestry



7

A villager put his house to the disposal of the Educare Centre at Burnshill



8

A flat roofed mud house with ms Ndlandlana, Funani and Silibhokwe at Lower Wolf River no 3



9

An Educare Centre along the main road of Lower Mnyameni 1



10

Children gather at
their Educare Centre
in Lower Gxulu



11

A traditional hut in
Tshoxa



12

New Rest Educare
Centre in the
building of a
friendly inhabitant



13

A church building at Lower Nqumeya accommodates happy Educare children



14

The researcher's daughter comforts a toddler at Upper Wolf River no 1 while the other children smile for the camera



15

A proper classroom at Sivuyile Lower Primary School serves as Educare Centre for Keiskammahoek children



16

A spacious primary school classroom at Elukhanyweni allows free movement



17

Singing is a favourite activity everywhere - also at Upper Wolf River no 1



18

Mrs Maki, a pensioned primary school teacher still enjoys teaching at Upper Ngumeya



19

St Matthew's pre-school boasts proper chairs and a table



20

Free choice activity at the Mtwaku Educare Centre



21

Group activities like singing at Upper Ngumeya appear often on the timetable



22

Teaching the young ones some English words with much enthusiasm



23

The supervisor and assistants at Upper Wolf River no 1 are proud of their Educare Centre



24

Time for a recitation at Upper Wolf River no 3



25

The kitchen section inside the hut at Lower Wolf River no 1



26

Areas indicated on the wall. Remains of the fire in the centre



27

Thango Gawu enjoys the swing at St Matthew's preschool. It is the only centre with outside equipment



28

Maize meal is collected from the Phambili Mawethu office at St Matthew's



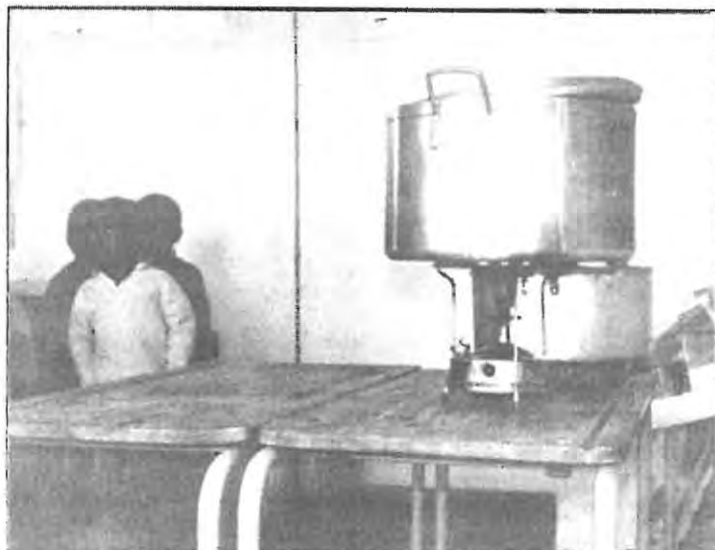
29

A field kitchen at Lower Gxulu inside a dilapidated mud hut



30

Waiting for their lunch at the Elukhanyweni Educare Centre



31

Washing dishes
after lunch at
Mtywaku. Notice
the Theme label
at top right



32

The Matolo Educare
children enjoy
their lunch. Chairs
are borrowed from
the primary school



33

The bare
minimum:
a building and
prospects of a
meal; a small
poster on the
wall shows
different shapes



34

Project co-ordinator
Eirene Camagu and
senior trainer
Edith Mhambi, two of
Phambili Mawethu staff



35 A happy group of supervisors at a training session at St Matthew's

LIST OF REFERENCES

- Adamson, J.W., 1919, A Short History of Education, Cambridge University Press, London.
- Almy, M., 1966, "Spontaneous Play: An Avenue for Intellectual Development", The Bulletin for the Institute of Child Study, Vol 28, No 2, pp354-369.
- Almy, M., 1975, The Early Childhood Educator at Work, McGraw-Hill, Paris.
- Ausubel, D.P., 1958, Theory and Problems in Child Development, Grune and Stratton, New York.
- Bac, M., 1983, "Measuring and Managing Energy Malnutrition in Rural Communities, Part 1", Family Practice, Vol IV, May 1983, pp3-7.
- Bakara, C.G.M., 1970, "Developing Learning Readiness in the African Child", West African Journal of Education, Vol 14, No 1, pp55-59.
- Behr, A.L. and Macmillan, R.G., 1971, Education in South Africa, J.L. van Schaik Ltd, Pretoria.
- Behr, A.L., 1976, Preprimary Education in the RSA, South African Association for the Advancement of Education, Publication Series, Potchefstroom.
- Bekker, S., 1984, Levels of Living in Ciskei : A Quantitative and Qualitative Analysis, Carnegie Conference Paper No 277, Cape Town.
- Bekker, S.B. and de Wet, C.J., 1982, Some Human and Structural Constraints on Rural Development. The Amatola Basin: a Case Study, Development Studies Working Paper no 5, Institute of Social and Economic Research, Rhodes University, Grahamstown.
- Bekker, S.B., de Wet, C.J. and Manona, C.W., 1981, A Socio-economic Survey of the Amatola Basin: Interim Report, Development Studies Working Paper no 2, Institute of Social and Economic Research, Rhodes University, Grahamstown.
- Bekker, S.B., de Wet, C.J. and Manona, C.W., 1981, A Socio-economic Survey of the Amatola Basin, ADRI Report no 11/81, University of Fort Hare, Alice.
- Bekker, S.B., Black P.A. and Roux, A.D., 1982, Some Development Issues in Ciskei, Development Studies Working paper No 10, ISER, Rhodes University, Grahamstown.
- BENBO, 1975, "Bureau for Economic Research re Bantu Development at the request of the Ciskei Government", Ciskei Economic Review, BENBO publication no 20275, Pretoria.
- BENSO, 1982, Statistical Survey of Black Development Part 2, Independent States, pp6-55, BENSO, Pretoria.
- Bereiter, C. and Engelmann, S., 1966, Teaching Disadvantaged Children in the Preschool, Prentice Hall Inc., New Jersey.

- Bereiter et al, 1966, "An Academically Oriented Preschool for Culturally Deprived Children", in Hechinger, F.M. (ed), Preschool Education Today, Doubleday and Co., Inc., N.Y., pp1-12.
- Bernstein, B., 1961, "Social Structure, Language and Learning", Educational Research, Vol 3, No 3, pp163-176.
- Beron, A., 1960, "The Five Year Old in the High School", The Journal for Education for Southern Africa, September 1960, pp10-13.
- Bigelow, E.B., 1935, "School Progress and Underage Children", Elementary School Journal, Vol 35, No 1, p63.
- Blalock, J.B., 1980, "Using Playleader Power", Childhood Education, Vol 57, No 1, pp90-93.
- Bodenstein, C.G., 1982, "Skills involved in Preparing the Child for School", Educamus, Vol 28, No 9, pp31-34.
- Bodenstein, C.G., 1983, "Early Education in a Developing Country: Bophuthatswana", Preschool Years, Barkly House, Cape Town, Vol 13, pp30-34.
- Boqwana, W.M., 1986, "Ciskei Minister Spells Out Plans for Rural Upliftment", Daily Dispatch, 24-6-1986.
- Boqwana, W.M., 1986, Policy Speech by the Honourable the Minister of Rural Development, Ciskei National Assembly, Bisho.
- Border Early Learning Centre, 1983 - 1987, Annual Reports, 50 Albany Street, East London.
- Boyd, W., 1914, From Locke to Montessori, George Harrap & Co., London.
- Boyd, W., 1968, The History of Western Education, Adam and Charles Black, London.
- Brandt, R.M., 1976, "The Readiness Issue To-day", The Teacher's College Record, Vol 71, No 2, pp439-449.
- Brittain, C.V., 1966, "Some Early Findings on Research on Preschool Programmes for Culturally Deprived Children", in Frost, J.L. (ed), Early Childhood Education Rediscovered, Holt, Rinehart and Winston, New York, pp286-293.
- Bureau of Statistics, RSA, 1968, South African Statistics, Pretoria.
- Caldwell, B.M., 1967, "What is the Optimal Learning Environment for the Young Child?", in Frost, J.L. (ed), Early Childhood Education Rediscovered, Holt, Rinehart and Winston, New York, pp50-67.
- Camp, J.C., 1973, "A Skill Development Curriculum for 3-, 4- and 5-year old Disadvantaged Children", in Spodek, B. (ed), Early Childhood Education, Prentice Hall, New Jersey.
- Cape Times, "Grass Roots Educational Trust", 31-10-1986.
- Carstens, P.D. et al, 1985, Education and Man Power Production (Blacks), No 6, Research Institute for Educational Planning, UOFS, Bloemfontein.
- Carstens, P.D. et al, 1986, Education and Man Power Production (Blacks), No 7, Research Institute for Educational Planning, UOFS, Bloemfontein.

- Carstens, P.D. et al, 1987, Education and Man Power Production (Blacks), No 8, Research Institute for Educational Planning, UOFS, Bloemfontein.
- Cartwright, J.D. et al, 1981, "A Survey of Learning Problems in Black Primary School Children", SA Medical Journal, Vol 59, No 14, pp488-490.
- Charton, N.C., 1982, "Ciskei, Outlook for the Future", South African Outlook, Vol 112, No 1327.
- Ciskei Department of Education, 1985, Annual Report April 1984 - March 1985, Department of Education, Government of the Republic of Ciskei, Zwelitsha.
- Ciskei Department of Education, Annual Report for 1986, Department of Education, Government of the Republic of Ciskei, Zwelitsha.
- Ciskei Department of Education, Annual Report for 1987, Department of Education, Government of the Republic of Ciskei, Bisho.
- Ciskei Government Directorate of Planning, 1987, Various Personal Communications, Bisho.
- Ciskei Government Directorate of Planning, 1985, Regional Development Plan: Region 2 - Dimbaza, Incorporating Keiskammahoeck and Middeldrift Districts, Government of the Republic of Ciskei, Bisho.
- Cleave, S., 1982, "Continuity from Preschool to Infant School", Educational Research, Vol 24, No 3, pp163-173.
- Coetzee, C.G., 1971, "Constitutional Development of the Ciskei", The Ciskei - a Bantu Homeland - a General Survey, Fort Hare University Press, Alice, pp64-87.
- Coetzee, T.M. en Swart, D.J., 1980, Manual for the Aptitude Test for School Beginners (ASB), HSRC, SAIPPR, Pretoria.
- Cohen, D.H. and Rudolph, M., 1977, Kindergarten and Early Schooling, Prentice Hall, New Jersey.
- Crause H.L. et al, 1982, The Ciskei Its Welfare and Social Services, University of Port Elizabeth, Port Elizabeth.
- Cronje, C.A., 1980, 'n Ondersoek na die Skoolgereedheid van Kinders wie se Moeders Voltyds Werk, Unisa, Pretoria.
- Daily Dispatch Supplement, 3-12-1985, East London.
- Daniel, J.M., 1982, "Ciskei, Outlook for the Future", South African Outlook, Vol 112, No 1327.
- Davids, A., 1984, Preschool Education; an Interventionist Strategy in Poverty, Carnegie Conference Paper No 102, Cape Town.
- Davis, H.G., 1980, "Reading Pressures in the Kindergarten", Childhood Education, Vol 57, No 1, pp76-79.
- De Jager, E.J., 1971, "The Tribal History of the Bantu of the Ciskei", The Ciskei - a Bantu Homeland - a General Survey, Fort Hare University Press, Alice, pp51-63.

- De Jager, M.P., 1982, 'n Vergelykende Studie van die Perseptuele Ontwikkeling van 'n Groep Preprimêre Leerlinge met Spesiale Verwysing na Visueel-Motoriese Persepsie, UOVs, Bloemfontein.
- De Jongh, J.M., 1986, "'n Skoolgereedmakingsprogram vir Swart Skoolbeginners", Kompas, RGN-IPEN Nuusblad, Nr 9, ppl-2.
- De Jongh, J.M. en Nel, A., 1979, 'n Skoolgereedmakingsprogram vir Swart Skoolbeginners, Sirsa, Pretoria.
- De Korte, G.J., 1977, Die Bydrae van die Kleuterskool tot die Kognitiewe Ontwikkeling van die Kind - 'n Empiriese Onderzoek, PUCHO, Potchefstroom.
- De Landsheere, G., 1977, "Preschool Education in Developing Countries", Prospects, Vol 7, No 4, pp506-511.
- De Lange, J.P., 1981, Provision of Education in the RSA, Report of the Main Committee of the HSRC Investigation into Education, Human Sciences Research Council, Pretoria.
- Department of Education and Training, n.d., Observation Scale OO/ET 176, Pretoria.
- Department of Education and Training, n.d., School Readiness, Educational Auxiliary Services, Pretoria.
- Department of Education and Training, 1986, Annual Report 1985, Government Printer, Pretoria.
- Deutsch, M., 1966, "Early Social Environment: Its Influence on School Adaptation", in Hechinger, F.M. (ed), Preschool Education Today, Doubleday and Co., N.Y., ppl3-24.
- Deutsch, M., 1966, "Facilitating Development in the Preschool Child", in Hechinger, F.M. (ed), Preschool Education Today, Doubleday and Co., N.Y., pp73-94.
- Deutsch, M., 1967, "The Disadvantaged Child and the Learning Process", The Disadvantaged Child (Selected papers of Martin Deutsch and Associates), Basic Books, Inc., N.Y. pl33-43.
- Development Bank of Southern Africa and Directorate of Planning, Ciskei Government, 1985, Ciskei Development Information, Government of the Republic of Ciskei, Bisho.
- Development Bank of Southern Africa, 1986, Private Correspondence, 10-7-86, Sandton, Johannesburg.
- De Villiers, M., 1980, An Evaluation of the Nutritional Situation in the Ciskei with Recommendations for Remedial Measures, D.Sc Thesis, University of Pretoria, Pretoria.
- De Wet, C. and Bekker, S., 1985, Rural Development in South Africa, A Case Study of the Amatola Basin in the Ciskei, Shuter and Shooter (in association with ISER, Rhodes University), Pietermaritzburg.
- Directorate of Planning, 1985, Regional Development Plan: Region 2 - Dimbaza, Incorporating Keiskammahoe and Middeldrift Districts, Republic of Ciskei.
- Douglas, J.W.B. and Ross, J.M., 1964, "The Later Educational Progress and Emotional Advantages of Children who went to Nursery School classes", Educational Research, Vol 7, No 1, pp73-80.

- Downing, J., 1963, "Is a Mental Age of Six Essential for Reading Readiness?", Educational Research, Vol 6, No 1, ppl6-28.
- Duminy, P.A., 1971, "Aspects of the Confrontation between Indigeneous Bantu Education and Western School Education with Special Reference to the Recent Educational Development in the Ciskei", The Ciskei - A Bantu Homeland - A General Survey, Fort Hare University Press, Alice.
- Duminy, P.A., 1973, African Pupils and Teaching them, Van Schaik Ltd, Pretoria.
- Du Plessis, 1981, "School Readiness (Evaluation)", Education and Culture, June 1981, pl2-14.
- Durkin, D., 1972, Teaching Young Children to Read, Allyn and Bacon, Boston.
- Durkin, D., 1976, Teaching Young Children to Read, Second Edition, Allyn and Bacon, Boston.
- Du Toit, A.S., 1982, "Reading Readiness", Educamus, Vol 28, No 9, pp 27-29.
- Elkind, J., 1973, "Preschool Education - Enrichment or Instruction?", in Spodek, B. (ed), Early Childhood Education, New Jersey, Prentice Hall, pl08-120.
- Engelbrecht, S.W.B. and Lubbe, A.N.P., 1981, The History of Education and Theory of Education, Via Afrika, Goodwood.
- Fabian, B.R., 1985, A Structured Preprimary School Programme, M.Ed Thesis, University of Witwatersrand, Johannesburg.
- Faure, J., 1971, "The Value of Nursery School Education for Primary School Education", Preschool Years, Barkly House, Cape Town, Vol 1, ppl0-15.
- Feldmann, S., 1966, "A Preschool Enrichment Programme for Disadvantaged Children", in Hechinger, F.M. (ed), Preschool Education Today, Doubleday and Co., New York, ppl3-24.
- Ferron, O.M., 1972, Factors of Heredity and Environment in the Scholastic Achievements of Children in New Countries, The College of Preceptors, London.
- Ferron, O.M., 1981, "The Reading and Arithmetic Attainments of Children at the Njala University Experimental School", Collection of Research Papers in Education, Vol I, Unitra Bureau of Educational Research, Umtata, ppl-7.
- Ferron, O.M., 1981, "The Effects of Early Environmental Stimulation among Freetown Creoles", Collection of Research Papers in Education, Vol I, Unitra Bureau of Educational Research, Umtata, pp217-221.
- Ferron, O.M., 1981, "Psychology and Race", Collection of Research Papers in Education, Vol I, Unitra Bureau of Educational Research, Umtata, pp2-6.
- Ferron, O.M., 1981, "An Experiment with the i.t.a. in Sierra Leone, West Africa", Collection of Research Papers in Education, Vol I, Unitra Bureau of Educational Research, Umtata, pp4-8.

- Ferron, O.M., 1981, "A Bird's Eye View of the British Educational System", Collection of Research Papers in Education, Vol I, Unitra Bureau of Educational Research, Umtata, ppl-10.
- Ferron, O.M., 1981, "Education and National Development", Collection of Research Papers in Education, Vol II, Unitra Bureau of Educational Research, Umtata, pp2-9.
- Ferron, O.M., 1981, "The Froebel-Montessori Controversy with Special Reference to Kindergarten Education in Guyana", Collection of Research Papers in Education, Vol II, Unitra Bureau of Educational Research, Umtata, ppl-12.
- Ferron, O.M., 1981, Developmental Theories, Unitra Bureau of Educational Research, Umtata.
- Ferron, O.M., 1982, Methodology for Educational Research in the Third World, University of Transkei, Umtata.
- Ferron, O.M., 1983, Developmental Psychology with Special Reference to the Third World, Transkei Educational Research Bureau, Umtata.
- Ferron, O.M., n.d., Principles of African Education, Unpublished article, Fort Hare University, Alice.
- Fincham, R.J., 1982, The Nutritional Status of Preschool Children in the Amatola Basin, Development Studies Working Paper no 9, ISER, Rhodes University, Grahamstown.
- Fincham, R.J. and Thomas, G.C., 1984, Nutritional Intervention : a Ciskei and Eastern Cape Perspective, Carnegie Conference Paper No 213, Cape Town.
- Fowler, W., 1965, "Concept Learning in Early Childhood", in Frost, J.L. (ed), 1968, Early Childhood Education Rediscovered, Holt, Rinehart and Winston, New York, ppl99-212.
- Foxcroft, C.D., 1985, The Use of the Reitan-Indiana Neuropsychological Test battery in South Africa - a Cross Ethnic Comparison of Normal Preschool Children, D.Phil Thesis, UPE, Port Elizabeth.
- Frasca, R., 1986, Director of Operation Hunger, East London, Private correspondence, 20-06-86.
- Fraser, A.L., 1984, The Early Identification of Learning Disabilities: A Study of the Predictive Validity of the Aptitude Test for School Beginners, M.Ed Thesis, University of Natal, Pietermaritzburg.
- Freeman, M.C., 1985, The Effect of Cultural Variables on the Good-enough-Harris Drawing Test and the Standard Progressive Matrices, M.A. Thesis, University of the Witwatersrand, Johannesburg.
- Frost, J.L., 1980, "Free to be: The Arts and Child Development", Childhood Education, Vol 57, No 1, pp66-71.
- Frost, J.L. (ed) 1968, Early Childhood Education Rediscovered, Holt, Rinehart and Winston, New York.
- Garbers, J.G., 1966, Psigiese Struktuur en Psigiese Ontwikkelingstand by die Beoordeling van Skoolrypheid, M.Sc-tesis, Unisa, Pretoria.

- Garbers, J.G. (ed), 1969, The Nature of School Readiness, Aspects of the Education of the 4 - 8 year old Child, UPE Publication Series, Port Elizabeth, pp48-58.
- Garbers, J.G., et al, 1976, Die Ontwerp van Opvoedingsprogramme vir Kleuters, Universiteits-uitgewers en Boekhandelaars, Stellenbosch.
- Gates, A.I., 1937, "The Necessary Mental Age for Beginning Reading", Educational Digest, Vol 11, p42-43.
- Geldenhuys, A., 1986, "Maternal Deprivation", Educamus, Vol 32, No 8, pp29-30.
- Gettman David, 1987, Basic Montessori Learning Activities to Under-fives, Christopher Helm, London.
- Getzels, J.W., 1966, "Preschool Education", Teachers College Record, Vol 68, No 5, pp219-228.
- Giliomae, Hermann and Schlemmer, Lawrence (ed), 1985, Up against the Fences, Poverty, Passes and Privilege in South Africa, David Philip, Cape Town.
- Gouws, L.A. et al, 1981, Psigologiese Woordeboek, McGraw-Hill Boekmaatskappy, Johannesburg.
- Gouws, M.A., 1977, 'n Evaluering van 'n Graad 1 Skoolgereedmakingsprogram op die Denkontwikkeling van Leerlinge, M.Ed-tesis, RAU, Johannesburg.
- Grant, G.V., 1969, The Organisation of Mental Abilities in an African Group in Cultural Transition, D.Phil thesis, University of Witwatersrand, Johannesburg.
- Gray, S.W., and Klaus, R.A., 1963, Interim Report: Early Training Programmes, George Peabody College, City Schares, Murfeesboro, Tennessee.
- Grey, Alida M., 1976, Die Belangrikheid van Spel by Aanvangsonderwys, M.Ed-tesis, Unisa, Pretoria.
- Grey, M.T., 1957, 'n Opvoedkundig-Sosiologiese Onderzoek van die Lewensomstandighede van Kinders wat voor Skoolpligtige Ouderdom tot Skool toegelaat is, M.A.-tesis, Unisa, Pretoria.
- Greyling, P.J., n.d., 'n Vergelykende Onderzoek na die Skoolprestasie van vyf-en sesjarige Skoolbeginners in Stds 3 en 4, Opvoedkundige Studies no 26, Universiteit van Pretoria, Pretoria.
- Grobler, L.C., 1972, Die Geskiedenis van die Kleuter en sy Skool in Pedagogiese Perspektief, Universiteit van Pretoria, Pretoria.
- Grove, M.C., 1972, Perseptuele Ontwikkeling by die Jong Kind, Transvaalse Onderwysdepartement, Pretoria.
- Grove, M.C., 1978, 'n Opvoedkundige Evaluering van die Onderbou en Implementering van 'n Skoolgereedmakingsprogram vir Skoolbeginners, Randse Afrikaanse Universiteit, Johannesburg.
- Grove, M.C., 1984, Volgende Jaar Skool Toe, HAUM, Pretoria.
- Grove, M.C., 1984, Skoolgereedheid 'n Inleidende Studie, Opvoedkunde Publikasiereeks van die RAU, nr 6, Butterworth, Durban.

- Grove, M.C. en Hauptfleisch, H.M., 1975, Perseptuele Ontwikkeling - 'n Handleiding, HAUM, Pretoria.
- Grove, M.C. en Hauptfleisch, H.M., 1981, Threshold - A School Readiness Programme, De Jager & Haum, Cape Town.
- Haasbroek, J.B., 1974, The Preschool Field in SA, Study Conference on Early Childhood Education, The Nursery School Association of SA, Johannesburg, pp11-20.
- Haenen, A.W., 1970, Van Kleuter tot Schoolkind, Wolters Noordhoff, Groningen.
- Hansen, J., 1984, Food and Nutrition Policy with Relation to Poverty: The Child Malnutrition Problem in South Africa, Carnegie Conference Paper No 205, Cape Town.
- Hartley, R.E., 1971, "Play, the Essential Ingredient", Childhood Education, Vol 48, No 1, pp80-84.
- Hay, A., 1984, "Lags in Emotional Development", Preschool Years, Barkly House, Cape Town, Vol 14, pp76-89.
- Hebb, D.O., 1949, The Organization of Behaviour, a Neuro-psychological Theory, Wiley, New York.
- Hechinger, F.M. (ed), 1966, "Passport to Equality", Preschool Education Today, Doubleday and Co., N.Y., pp1-12.
- Herbst Ingrid, 1986, Die Invloed van Geselekteerde Spele op die Visueel-perseptuele Vermoë van Sotho-skoolbeginners, M.Ed-thesis, Universiteit van Oranje-Vrystaat, Bloemfontein.
- Heyns, M.M., 1967, Verslag van 'n Sending na Oorsese Lande in verband met Kleuteronderwys, Transvaal Onderwysdepartement, Pretoria.
- Holdt, C.C.S., 1971, "Constitutional Development", The Ciskei - a Bantu Homeland - a General Survey, Fort Hare University Press, Alice, pp200-215.
- Houghton, D.H. and Walton, E.M., 1952, Keiskammahoek Rural Survey, Volume 2: The Economy of a Native Reserve, Shuter and Shooter, Pietermaritzburg.
- Hill, Kaplan, Scott and Partners, n.d., Keiskamma River Basin Study, Volume 3: Developmental Proposals, Kloof Street, Cape Town.
- HSRC, n.d., Xhosa Instructions for the Application and Interpretation of the Aptitude Test for School Beginners (ASB), Institute for Psychometric Research, 1154 PBV/Xhosa, HSRC, Pretoria.
- HSRC, 1971, Report of the Committee for Differentiated Education and Guidance in connection with a National System of Education at Primary and Secondary school level with reference to School Guidance as an Integrated Service of the System of Education for the Republic of South Africa and South West Africa, Part 1, HSRC, Pretoria.
- HSRC, 1978, Interim Catalogue of Tests, Institute for Psychometric Research, HSRC, Pretoria.

- HSRC, 1985, SETT School Readiness Evaluation by Trained Testers, Practical Workbook with Examples and Hints, Institute for Psychological and Edumetric Research 2193/6, Pretoria.
- Hunt, J.McV., 1961, Intelligence and Experience, Ronald Press, New York.
- Jooste, J.H., 1976, Die Probleem van Skoolgereedheid: 'n Sosiologiese-Pedagogiese Studie met Spesiale Verwysing na die Milieugestremde Kind en Toetsing vir Skoolgereedheid, M.Ed-tesis, UOVS, Bloemfontein.
- Joubert, M., 1984, "School Readiness - If Not Age, What Then?", Compass, HSRC-IPER News Letter, No 5, ppl-2.
- Joubert, M., 1984, Nursery School Questionnaire for the Evaluation of School Readiness (NQES), HSRC, IPER, 2138/10, Pretoria.
- Joubert, M., 1984, Ouervraelys vir die Beoordeling van Skoolgereedheid (OVBS), HSRC, IPEN, 2138/7, Pretoria.
- Joubert, M., 1986, Manual for SETT (School Readiness Evaluation by Trained Teachers), Part 11, Administration and Scoring Procedure, HSRC, IPER, 2139/4, Pretoria.
- Jowett, S., 1986, "Does Kind of Preschool Matter?", Educational Research, Vol 28, No 1, p21-31.
- Judd, J., 1988, "Britain's Educational Under-class", Observer, 10-04-1988.
- Keliher, A.V., 1967, "Many Dimensions of Readiness", Childhood Education, Vol 43, No 7, pp442-3.
- Kellmer-Pringle, M.L.K., 1971, Deprivation and Education, Studies in Child Development, 2nd Edition, Longman, London.
- King, J., 1983, The Effects of Nursery Education as Measured in Junior Primary School Children, University of Pretoria, Pretoria.
- Kirk, S.A., 1958, Early Education of the Mentally Retarded, University of Illinois Press, Urbana, Illinois.
- Kohlberg, L., 1968, "Early Education: A Cognitive-developmental View", Child Development, Vol 39, No 4, ppl013-1062.
- Kohn, M. and Rosman, B.L., 1974, "Social-Emotional, Cognitive and Demographic determinants of Poor School Achievement", Journal of Educational Psychology, Vol 66, No 2, pp267-276.
- Kruger, M.J.L., 1984, 'n Ondersoek na die Verband tussen Kronologiese Ouderdom en die Graad van Skoolgereedheid, Unisa, Pretoria.
- Krugman, J., 1956, "Cultural Deprivation and Child Development", High Points, Nov 1956, No 38, p5-20.
- Lawson, J. and Silver, H., 1973, A Social History of Education in England, Methuen and Co., London.
- Lee, E.S., 1951, "Negro Intelligence and Selective Migration, A Philadelphia Test of the Klineberg Hypothesis", American Sociological Review, No 16, p227-233.

- Lehobye, S.M., 1978, The Need of Preschool Education in the Odi District of Bophuthatswana: a Psycho-pedagogical Approach, M.Ed thesis, University of the North, Pietersburg.
- Le Roux, S.S., 1980, Pedagogiese Grondslae van die Preprimêre Onderwys, Universiteit van Pretoria, Pretoria.
- Long, J. (Co-ordinator), n.d., Rural Outreach Programme, Full Report for the Period June 1986 - April 1987, Centre for Social Development, Rhodes University, Grahamstown.
- Lorentz, G., 1986, Personal Interview with Regional Director of Phambili Mawethu Project, King William's Town, 13-03-1986.
- Lupondwana, P., 1987, Personal Interview with Director of Education, Mathole Circuit, Keiskammahoek, 25-02-1987.
- Macgregor, J., 1987, "The Republic of Ciskei", Supplement to Africa Institute Bulletin, Vol 27, No 6, ppl-6.
- Malan, du Toit, 1987, "The Republic of Ciskei", Supplement to Africa Institute Bulletin, Vol 27, No 6, pp6-8.
- Malan, J.A., 1982, Moeder-Kind-Verhouding as 'n faktor in Skool-gereedheid, Universiteit van Stellenbosch, Stellenbosch.
- Malherbe, E.G. (ed), 1937, Educational Adaptations in a Changing Society, Report of the SA Education Conference of 1934 of the New Education Fellowship, Juta & Co., Cape Town.
- Manjezi, S., 1987, Personal Interview with Senior Planner of Education, Ciskei Department of Education, Zwelitsha, 29-06-1987.
- Margo, G., Lipschitz, S. et al, 1976, "Protein Calorie Malnutrition and Nutritional Anaemia in Black Preschool Children in a SA Semirural Community", SA Medical Journal, Vol 50, pp67-73.
- Maurice, E. (chairman), 1982, Memorandum of Views on the Report of the Main Committee of the HSRC Investigation into Education, Mowbray Inter-Race Group, Sub-Committee on Education, Pretoria.
- Meade, J.E. (ed), 1965, "Genetic and Environmental Factors in Human Ability", Eugenics Society Symposia, Vol 2, Oliver and Boyd, London.
- Melamane, H.S., 1986, Personal Interview with the Director of Rural Development, Ciskei Government, Zwelitsha, 16-04-1986.
- Mills M.E.E. and Wilson, M., 1952, Keiskammahoek Rural Survey, Volume IV: Land Tenure, Shuter and Shooter, Pietermaritzburg.
- Montessori, M., 1912, The Montessori Method, William Heineman, London, Translated from the Italian by A.E. George.
- Morphett, M.V. and Washburne, C., 1931, "When should Children Begin to Read?", Elementary School Journal, Vol 31, pp496-503.
- Mukerji, R., 1965, "Roots in Early Childhood for Continuous Learning", in Frost, J.L. (ed), Early Childhood Education Rediscovered, Holt, Rinehart and Winston, New York, pp27-36.

- Nel, B.F. en Sonnekus, M.C.H., 1963, Die Nel-Sonnekus-ontwikkelingskaal vir Voorskoolse Kinders, Opvoedkundige Studies no 42, Universiteit van Pretoria, Pretoria.
- Nell, M., 1983, "School Readiness Assessment: Preschool Teachers and/or Standardised Tests", Preschool Years, Barkly House, Cape Town, Vol 13, pp21-29.
- Nicol, G., 1980, Report on Black Preschool Facilities in Greater East London Area and Ciskei, Urban Foundation, East London.
- Nongogo, S., 1986, Personal Interview with the Director-General of the Dept of Rural Development Ciskei Government, Zwelitsha, 25-05-1986.
- Nongogo, S.S., 1987, Personal Interview with Inspectress for Junior Primary and Preprimary, Mathole Circuit, Dept of Education Ciskei, Keiskammahoek, 25-02-1987.
- Nongogo, S.S., 1988, Personal Interview with Inspectress for Junior Primary and Preprimary, Mathole Circuit, Dept of Education Ciskei, Keiskammahoek, 20-04-1988.
- Ntutu, H.J., 1987, Report on Educare Centres Year Ending December 1986, Dept of Agriculture and Rural Development, Republic of Ciskei, Zwelitsha.
- Nyikana, H.K., 1982, Pupil Repetition in the Primary Schools of Ciskei, M.Ed Thesis, University of the OFS, Bloemfontein.
- Odendaal, J.N., 1987, The Witness of the Church in Ciskei, Institute for Missiological Research, University of Pretoria, Pretoria.
- Olivier, S.E., 1976, Van Kleuter tot Skoolkind -- 'n Psigo-pedagogiese Perspektief, Universiteit van Pretoria, Pretoria.
- Onderwysburo: Skoolrypheid van Vyfjarige Leerlinge, Transvaalse Onderwysdepartement Werkstuk No 47, Pretoria.
- Oosthuizen, J.H.C., 1971, Report of the Committee for Differentiated Education and Guidance with regard to a National Preprimary Educational Programme for the Republic of SA and South West Africa, Part 2, Report no 0-2, HSRC, Pretoria.
- Owen, K. and Swanepoel, A., 1985, Validity Study of the Aptitude Test for School Beginners (ASB) for Blacks, Report P-53, Human Sciences Research Council, Pretoria.
- Page, D., 1982, Strategy and Guidelines for the Physical Development of the Republic of Ciskei, Institute for Planning Research, US, Stellenbosch.
- Peel, E.A., 1960, The Psychological Basis of Education, Oliver and Boyd, London.
- Pityi, B.N., 1986, Policy Speech by the Honourable Minister of Education, Government of the Republic of Ciskei.
- Pityi, B.N., 1987, Policy Speech by the Honourable Minister of Education, Government of the Republic of Ciskei.
- Pityi, B.N., Daily Dispatch, 04-07-1987, East London.

- Plowden, Lady Bridget (Chairman), 1967, Children and their Primary Schools, Report of the Central Advisory Council for Education (England), Her Majesty's Stationary Office, London.
- Poho, Q.S.N., 1987, Personal Interview with Senior Planner Preprimary Education, Department of Education, Zwelitsha, 18-03-1987.
- Pollard, H.M., 1956, Pioneers of Popular Education 1760-1850, John Murray, London.
- Potgieter, F.J., 1961, 'n Oorsig oor die Vraagstuk van Skoolrypheid, Opvoedkundige Studies no 36, Universiteit van Pretoria, Pretoria.
- Power, E.J., 1970, Main Currents in the History of Education, McGraw-Hill, New York.
- Quail, G.P. (Chairman), 1980, Ciskei Commission Report, Conference Associates, Silverton.
- Ramphal, A., 1972, An Investigation into the Suitability of the National Group Test for Five-and-Six-Year-Olds as an Instrument for Measuring School Readiness among a Group of Indian Children in Durban, M.Ed thesis, UDW, Durban.
- Ramsden, N., 1982, "An Educational Programme that Really Changes Children", Journal of Natal's Teachers' Association, September 1982, pp152-3.
- Ras, B., 1987, Manual for the Learning Readiness Test for Black School Beginners (Xhosa), Child Guidance Institute, UP, Pretoria.
- Reilly, Pamela E. and Hofmeyr, E.J.M., 1983, Preprimary Education in the RSA, Report O-167, Human Sciences Research Council, Pretoria.
- Reilly, P., 1983, Criteria for the Evaluation of the Psycho-pedagogical Accountability of Preschool Programmes, M.Ed thesis, University of Pretoria, Pretoria.
- Rhenoster, J.C., 1971, Skool-gemeenskapsverhouding: 'n Sosiologies-pedagogiese Onderzoek met Spesiale Verwysing na die Tswana-volkseenheid in Wes-Transvaal en Noord-Kaapland, Universiteit van die Noorde, Pietersburg.
- Riordan, Z.V.A., 1978, Locus of Control in SA, a Cross-ethnic Study, D.Phil thesis, UPE, Port Elizabeth.
- Rochford, K., 1985, "Recent Research in Early Childhood Education", Preschool Years, Barkly House, Cape Town, Vol 15, pp14-18.
- Rossouw, B., 1986, Personal Interview with Regional Director, Phambili Mawethu Project, King William's Town, 16-4-1986.
- Rusk, R.R., 1933, A History of Infant Education, University of London Press, London.
- Rusk, R.R., 1952, The Doctrines of the Great Educators, MacMillan and Co., Ltd., London.
- Rutter, M., 1972, Maternal Deprivation Reassessed, Penguin Books, Harmondsworth.
- Scheffer, R., 1985, "Rural Apathy Notion Disproved on the Hills around Keiskammahoek", Supplement to the Daily Dispatch, 3-12-1985.

- Scheffer, R., 1985, "Towards Profit, Hopes Pinned on New Independent Farmers", Supplement to the Daily Dispatch, 3-12-1985.
- Schermann, A., 1966, "Cognitive Goals in the Nursery School", in Frost, J.L. (ed), 1968, Early Childhood Education Rediscovered, Holt, Rinehart and Winston, New York, pp265-276.
- Schmidt, W.H.O., 1954, "An Investigation to Determine the Optimum Mental Age for Commencing Reading Instruction under Conditions at Present Obtaining in Certain Schools in Pietermaritzburg and Durban", Journal for Social Research, Vol 5, No 2, pp 119-128.
- Schoeman, S., 1987, "The Republic of Ciskei", Supplement to Africa Institute Bulletin, Vol 27, No 6, p2.
- Schonell, F.J., 1951, The Psychology and Teaching of Reading, Third Edition, Oliver and Boyd, London.
- Scrooby, M., 1986, "More than School Readiness - Readiness for Life", SA Today, Vol 3, No 4, p11.
- Sebe, L.L., 1982, Address on the Official Launching of the Ciskei Rural Development Programme, Bisho, 28 August 1982.
- Seyfried, H., 1969, "Problems, Attempts at Solution and Results, School Readiness in Austria", Developments in Educational Testing, University of London Press Ltd, London, Vol 2, p21.
- Short, A. (ed), 1981, "Preschool Staffing and Training in South Africa", Fact Paper No 3, The Western Cape Conference on Preschool Care and Education, Early Learning Resource Unit, Cape Town, 1982.
- Short, A. (ed), 1981, "Preschool Care and Education in other Countries", Fact Paper No 5, The Western Cape Conference on Preschool Care and Education, Early Learning Resource Unit, Cape Town, 1982.
- Short, A., 1984, The Role of Preschool Education in Relation to the Problems of the Poor, Carnegie Conference Paper No 103, Cape Town.
- Short, A. and Van der Merwe, K., 1985, "Continuity in the Education Process from Babyhood to Adulthood", Preschool Years, Barkly House, Cape Town, Vol 15, pp60-65.
- Skuy, M., Shmukler, D. & Wetsaway, M., 1985, "Relationships among Cognitive and Socio-emotional Measures of Preschool and Primary School Functioning", SA Journal of Education, Vol 5, No 1, pp35-40.
- Slabbert, M., 1976, Preschool Facilities for Coloured and Black Children in Greater Cape Town, Institute for Social Development, University of Western Cape, Bellville.
- Smilansky, Sarah, 1964, Progress Report on a Programme to Demonstrate Ways of Using a Year in Kindergarten for Scholastic Success of Culturally Deprived Children, Henrietta Szold Institute, Jerusalem.
- Smith, R., n.d., A Screening Test Battery for Bridge Class Pupils, Department Remedial Education, Soshanguve College for Continued Training, Soshanguve.

- Sonquist, H.D. and Kamii, C.K., 1967, "Applying some Piagetian Concepts in the Classroom for the Disadvantaged", in Frost, J.L. (ed), Early Childhood Education Rediscovered, Holt, Rinehart and Winston, New York, pp169-180.
- Sours, J., 1973, "Play and Human Development", International Journal of Early Childhood, Vol 5, pp139-142.
- South African Association for Early Childhood Education, 1980, Nursery School Handbook, J.L. van Schaik, Pretoria.
- South African Institute of Race Relations, 1972, Race Relations Survey, Johannesburg.
- South African Institute of Race Relations, 1986, Race Relations Survey, Johannesburg.
- Spodek, B. (ed), 1973, Early Childhood Education, Prentice-Hall, New Jersey.
- Stanley, J.C. (ed), 1972, Five Experimental Approaches to Early Childhood Education, Preschool Programmes for the Disadvantaged, John Hopkins University Press, Baltimore.
- Steenekamp, J.C., 1971, "Die Visuo-motoriese Gereedheid van Bantoe Skoolbeginners", in Nel, B.F. (red), Die Brug tussen Opvoedkundige Teorie en Navorsing en die Opvoedings-en Onderwyspraktyk, Publikasiereeks van SAVBO nr 5, pp217-242.
- Stein, Z. and Susser, M., 1970, "Mutability of Intelligence and Epidemiology of Mild Mental Retardation", Review of Educational Research, Vol 40, No 1, pp29-67.
- Stulting, D.B., 1971, Skooltoelatingsouderdom en Milieufaktore by die Skoolprestasie van 'n Generasie St X-leerlinge, M.Ed-thesis, RAU, Johannesburg.
- Super, S., 1979, An Evaluation of the Influence of a Learning Readiness Programme on the Perceptual Development of the Grade 1 Child, M.Ed thesis, RAU, Johannesburg.
- Terblanche, T.J., 1983, The Educational Situation in a Sample of Ciskeian Families, HSRC Report No 0-128, Pretoria.
- Theron, A.F., 1975, "Die Problematiek van die Kind met Leerprobleme", Educare (Journal of the Education Faculty), 04-01-1975, Unisa, Pretoria, pp37-47.
- Thomas, G.C., 1981, "The Social Background of Childhood Nutrition in the Ciskei", Social Sciences and Medicine, Vol 15a, pp551-555.
- Tough, J., 1973, Focus on Meaning, Unwin Educational Books, George Allen and Unwin Ltd, London.
- Tough, J., 1980, Talking and Learning, Ward Lock Educational, London.
- Tunmer, R., n.d., Education and the Deprived Child, Unpublished article, Grahamstown.
- Udwin, O., 1983, "Imaginative Play Training as an Intervention Method with Institutionalised Preschool Children", British Journal of Educational Psychology, Vol 53, No 1, pp32-39.

- Ulster, J.J. (Chairman), n.d., Report on the 1984 ASPECT Workshop on the HSRC Report on Preschool Education in the RSA, Association for Preschool Care and Training, Cape Town.
- Unesco, 1961, Recommendations no 53 to Ministries of Education concerning the organization of Pre-primary Education, 24th International Conference on Public Education, Geneva.
- Van den Berg, O. and Vergnani, T., 1986, Providing Services for Preschool Children in South Africa, Report of an Investigation conducted on behalf of the SAAECE, University of Western Cape, Bellville.
- Van der Eyken, W., 1982, "Europe's Changing Preschool Pattern", The Times Educational Supplement, 30-07-1982.
- Van der Kooy, R. (ed), 1981, The Republic of Ciskei, a Nation in Transition, BENSO, Pretoria.
- Van der Merwe, J., 1974, "Die Nuutste Ontwikkeling op die Preprimêre Onderwysvlak", Educare (Journal of the Education Faculty), Unisa, 03-01-1974, pp62-5.
- Van der Merwe, Jacoba, 1980, Die Dagprogram in die Preprimêre Skool, Unisa, Pretoria.
- Van der Merwe, K.E., 1979, Learning through Play, Handbook 1, Bernard van Leer Foundation, The Hague.
- Van der Merwe, K.E., 1979, Teacher-Aide Programme: Supervisor's Guide No 2 and Workbook No 2, Bernard van Leer Foundation, The Hague.
- Van der Merwe, N.J., 1978, Kleuterskoolonderwys, Skolastiese Vordering en Persoonlikheid, RGN, Pretoria.
- Van der Spuy, D.S., 1966, Die Vraagstuk van Skoolrypheid en Skoolgereedheid, D.Ed-thesis, Unisa, Pretoria.
- Van der Walt, C.P. (Voorsitter), SABRA Jaarboek 1979, SABRA, Pretoria.
- Van Leer, Bernard, 1986, Alternatives in Early Childhood Care and Education, Report of the Bernard van Leer Foundation, 1984-1985, The Hague.
- Van Heerden, J.R., 1983, "School Health Services", Preschool Years, Barkly House, Cape Town, Vol 13, pp36-39.
- Van Rensburg, C.F.W.J., 1979, "'n Evaluering van Aanvangstrategieë vir Kansarme Indiërskoolbeginners in die Lig van hul Primêre Opvoedingsomstandighede", Preschool Years, Barkly House, Cape Town, Vol 9, pp25-29.
- Van Westende, F.M.L., 1982, The Identification of Specific Learning Disabilities in Preprimary School Children, M.Ed thesis, Unisa, Pretoria.
- Vaughan, T van Breda, 1977, Die Wisselwerking tussen Werkhouding en Onderrig by die Noord-Sothosprekende Skoolbeginner, D.Ed-thesis, RAU, Johannesburg.
- Verzaro-Lawrence, M., 1980, "Early Childhood Education: Issues for a New Decade", Childhood Education, Vol 57, No 1, ppl04-108.

- Viljoen, E.J., 1983, 'n Ondersoek na Kleuter-Ouer-relasies met Besondere Verwysing na die Opvoedingstaak van die Vader, Unisa, Pretoria.
- Webber, Vera K., 1978, An Outline of the Development of Preschool Education in SA 1930 - 1977, The Association for Early Childhood Education, Johannesburg.
- Weber, Lilian, 1971, The English Infant School and Informal Education, Prentice-Hall, New Jersey.
- Wein, N., 1971, "The Education of Disadvantaged Children", Educational Research, Vol 13, No 1, pp12-19.
- Whisson, M.G., De Wet, C.W. et al, 1982, Migrancy and Development: Prelude and Variations on a Theme, Development Studies Working Paper no 11, ISER, Rhodes University, Grahamstown.
- Weikart, D.P., 1972, "Relationship of Curriculum, Teaching and Learning in Pre-school Education" in Stanley, J.C. (ed.), Preschool Programmes for the Disadvantaged, pp22-63, John Hopkins University Press, Baltimore.
- Wiehahn Commission Report, 1982, Lex Patria, Johannesburg.
- Whitener, C.B. and Kersey, K., 1980, "A Purple Hippopotamus? Why not?", Childhood Education, Vol 57, No 1, pp83-89.
- Whittle, E.P., 1982, "School Readiness, Part I", Educamus, Vol 28, No 7, pp32-33.
- Whittle, E.P., 1982, "School Readiness, Part II", Educamus, Vol 28, No 8, pp33-34.
- Whittle, E.P., 1982, "School Readiness, Part III", Educamus, Vol 28, No 10, pp25-26.
- Whittle, E.P., 1982, "School Readiness, Part IV", Educamus, Vol 28, No 9, pp29-31.
- Wilson, M. et al, 1952, Keiskammahoek Rural Survey, Volume 3: The Social Structure, Shuter and Shooter, Pietermaritzburg.
- Zenani, N., 1987, Personal Interview with Clerk in Office of Department of Rural Development and Agriculture, Zwelitsha, 19-03-1987.
- Zonke, Z., 1986, Various Personal Interviews with Field Worker of Border Early Learning Centre, East London.

OTHER WORKS CONSULTED

- Adler, Sol et al, 1984, Lesson Plans for the Infant and Toddler, C.T. Thomas, Springfield, Illinois.
- Badenhorst, H.J., 1975, Die Leerwêreld van die Bantoe-kind as Beleweniswêreld, RGN Publikasiereeks nr 53, N.G.Kerk-Boekhandel, Pretoria.
- Behr, A.L., 1976, Preprimary Education in the RSA, South African Association for the Advancement of Education Publication Series, Potchefstroom.
- Borok, B., 1984, "Training of Teachers", Report on the 1984 ASPECT Workshop, Paper No 5, Association for Preschool Care and Training, Cape Town.
- Bowley, A.H., 1957, The Natural Development of the Child, E&S Livingstone Ltd, London.
- Boyd, W., 1914, From Locke to Montessori, George Harrap & Co., London.
- Braun, S.T. and Edward, E.P., 1972, History and Theory of Early Childhood Education, Woodworth Publishing Co., Inc., California.
- Charton, Nancy (Ed), 1980, Ciskei A South African Homeland, Croom Helm Ltd, London.
- Cooper, M.G., 1966, "When is the Child ready to begin Schooling?", Times Education Supplement, 2664, June 1966.
- Davids, F., "Some Ideas on a System for the Preschool Field", Report on the 1984 ASPECT Workshop, Paper No 4, Association for Preschool Care and Training, Cape Town.
- Fullard, E.W., 1984, "An Overview of the HSRC Report on Preprimary Education and Care in the RSA", Report on the 1984 ASPECT Workshop, Paper No 2, Association for Preschool Care and Training, Cape Town.
- Gitywa, B.N., 1976, The Soweto Early Learning Centre, Paper presented at the Symposium of South African Association for Early Childhood Education on Better Care for Children in SA, Grahamstown.
- Gross, D.W., 1974, "Encouraging the Curious Mind through the Curriculum", Childhood Education, Vol 51, No 1, pp5-7.
- Heffernan, H., 1966, "A Vital Curriculum for Today's Young Child", in Frost, J.L. (ed), Holt, Rinehart and Winston, Early Childhood Education Rediscovered, New York.
- Heywood, K., 1973, The Child: Learning and Living, Longman, Green and Co., London.
- Hume, E.G., 1951, Learning and Teaching in the Infant School, Longman, Green and Co., London.
- Ijsselmuiden, C.B., 1984, "The Nutritional Status of Children under the age of 5 years in Northern Gazankulu", SA Medical Journal, Vol 65, pp364-347.

- Job, H., n.d., "Training of Teacher Assistants", Report on the 1984 ASPECT Workshop, Paper No 6., Association for Preschool Care and Training, Cape Town.
- Lovell, K., 1969, Educational Psychology and Children, University of London Press Ltd, London.
- Luthuli, P.C., 1981, The Philosophical foundations of Black Education in South Africa, Butterworths, Durban.
- Luthuli, P.C., 1982, An Introduction to Black-oriented Education in SA, Butterworths, Durban.
- Margo, G., Baroni, Y. et al, 1978, "Protein Energy Malnutrition and Nutritional Anaemia in Preschool Children in Rural Kwazulu", SA Medical Journal, Vol 53, pp21-26.
- Meyer, A.L., 1980, ACEI Summer Seminar Taipei, Taiwan, Childhood Education, Vol 57, No 1, pp80-82.
- Michie, S., 1984, "Number Understanding in Preschool Children", British Journal of Educational Psychology, Vol 54, No 3, pp245-253.
- Nash, M. and Charton, N. (ed), 1981, An Empty table? Churches and the Ciskei's Future, The S.A. Council of Churches, Johannesburg.
- Psacharopoulos, G., "Economics of Early Childhood Education and Day Care", International Review of Education, Vol 28, No 1, pp53-70.
- Rickards, J., 1984, "Some Ideas on a Consistent Framework for the Pre-school Field", Report on the 1984 ASPECT Workshop, Paper No 3, Association for Preschool Care and Training, Cape Town.
- Romela, D., 1984, The Problem of School Readiness in a Socially Deprived Indian Area, M.Ed Thesis, Unisa, Pretoria.
- Short, A., 1976, Towards Better Care for Children Living in Poverty: The Athlone Early Learning Centre, Paper presented at the Symposium of South African Association for Early Childhood Education on Better Care for Children in SA, Grahamstown.
- Smith, B., 1984, Education: The Rural poor: The Delusion of Basic Education, Carnegie Conference Paper No 98, Cape Town.
- Sonnekus, M.C.H., 1974, The Learning Child, McGraw-Hill, Johannesburg.
- Story, R.A., 1952, National History of the Keiskammahoek District, Keiskammahoek Rural Survey, Shuter and Shooter, Pietermaritzburg.
- Todd, V.E., 1964, The Years before School: Guiding Preschool Children, New York, MacMillan.
- Van der Merwe, K., 1984, "Basic Educare Worker Training (In-service)", Report on the 1984 ASPECT Workshop, Paper No 7, Association for Preschool Care and Training, Cape Town.
- Van Niekerk, P.A., 1971, Aandagsfluktuasie as verskynsel by die Onderaktualisering van Intensionaliteite met Spesiale Verwysing na die Agterlike Kind, D.Ed-tesis, Universiteit van Pretoria, Pretoria.
- Vrey, J.D., 1979, The Self-actualising Educand, Unisa, Pretoria.