

053018/2



182571834F



RGN-HSRC

RGN-BIBLIOTEEK

HSRC LIBRARY

VERVALDATUM/DATE DUE

1983 -03- 3 1

1984 -06- 2 3

1985 -06- 1 5

1988 -07- 2 7

12 FEB 1990

09 .IIII 1990

30 NOV 1991

1994 -06- 0 2

1997 -07- 2 2

00000270000



001.3072068 HSRC EDUC 8



* 0 0 2 3 8 3 *



RGN HSRC

Prof. J.P. de Lange
Chairman of the Main Committee
HSRC Investigation into Education

**REPORT OF THE WORK COMMITTEE:
EDUCATION FOR CHILDREN WITH SPECIAL
EDUCATIONAL NEEDS**

As chairman I take pleasure in submitting the report of the Work Committee: Education for children with special educational needs to the Main Committee for consideration. The final chapter contains a summary of the report.

J. G. Garbers.

DR J.G. GARBERS
CHAIRMAN

STATEMENT

This report has been prepared by the Work Committee: Education for children with special educational needs instituted by the HSRC Main Committee for the Investigation into Education.

This report reflects the findings, opinions and recommendations of the Work Committee: Education for children with special educational needs and, where applicable, those of groups or individuals in the work committee with regard to matters about which there are differences of opinion. The findings, opinions and recommendations contained in this report do not necessarily reflect the point of view of either the HSRC or the HSRC Main Committee for the Investigation into Education .

This report is regarded by the HSRC Main Committee for the Investigation into Education as a submission of the Work Committee: Education for children with special educational needs to the Main Committee. The point of view and recommendations of the HSRC Main Committee will be contained in its final report that will be submitted to the Cabinet.

Human Sciences Research Council

Investigation into Education

Report of the Work Committee:

**Education for children with
special educational needs**

**PRETORIA
JULY 1981**

RGN BIBLIOTEK HSRC
LIBRARY

1982 -02-22

STANDKODE 001-3072068 HSRC EDUC 8	REGISTERNUMMER	
BESTELNUMMER 9	053018	2

ISBN 0 86965 858 1
PRICE: R7,20
(G.S.T. Included)

Copyright reserved

CONTENTS

	PAGE
ORIENTATION	iii
EDUCATION FOR CHILDREN WITH SPECIAL EDUCATIONAL NEEDS	
CHAPTER	
1 INTRODUCTION AND ORIENTATION	1
1.1 Premises and delimitations	1
1.2 Terminology	3
1.3 Operationalization and execution of the investigation	9
1.4 The establishment of this report	27
2 PRESENT PROVISION OF EDUCATION FOR CHILDREN WITH SPECIAL EDUCATIONAL NEEDS IN THE RSA	29
2.1 Introduction	29
2.2 Provision of Education for scholastically impaired children in the RSA	29
2.3 Present provision of education for the highly gifted child in the RSA	69
2.4 Provision of education for the handicapped child outside the mainstream of the regular school system	74
2.5 Professional personnel concerned with the education of the child with special educational needs	116
2.6 The contribution of the private sector to provision of education for handicapped and impaired pupils	122
2.7 Conclusion	124
3 CONSTITUENTS OF A SYSTEM FOR PROVISION OF EDUCATION FOR CHILDREN WITH SPECIAL EDUCATIONAL NEEDS	125
3.1 Rationale for the development of a system for provision of education for children with special educational needs	125
3.2 Categories of children who have to be accommodated	127
3.3 Educational and other professional personnel concerned	154

CHAPTER	PAGE
4	158
GUIDELINES FOR DESIGNING A SYSTEM FOR PROVISION OF EDUCATION FOR PUPILS WITH SPECIAL EDUCATIONAL NEEDS	
4.1	158
Introduction	
4.2	159
The control structure of education in the RSA	
4.3	161
The educational structure	
4.4	170
The finance structure	
4.5	170
The supporting structure	
5	173
SUMMARY OF RECOMMENDATIONS IN RESPECT OF EDUCATION FOR CHILDREN WITH SPECIAL EDUCATIONAL NEEDS	
5.1	
Orientation: Main problems in the education of children with special educational needs, extent of the research and starting points	
5.2	
Context: system for provision of education for pupils with special educational needs	
5.3	
The creation of an infrastructure with a view to effective identification, evaluation, diagnosis, of rendering assistance to and therapy for children with special educational needs	
5.4	
The section for evaluation and guidance (SEG) as part of the co-operative educational service centres (CESC)	
5.5	
Research requirements	
5.6	
Priorities	
5.7	
Conclusion	
BIBLIOGRAPHY	
APPENDIX	

ORIENTATION

THE REQUEST

In June 1980 the Cabinet requested the Human Sciences Research Council to conduct an in-depth investigation into all facets of education in the RSA. The request to the HSRC read as follows:

"Your Council, in co-operation with all interested parties, must conduct a scientific and co-ordinated investigation and within 12 months make recommendations to the Cabinet on:

- (a) guiding principles for a feasible education policy in the RSA in order to
 - (i) allow for the realization of the inhabitants' potential,
 - (ii) promote economic growth in the RSA, and
 - (iii) improve the quality of life of all the inhabitants in the country,
- (b) the organization and control structure and financing of education
- (c) machinery for consultation and decision-making in education
- (d) an education infrastructure to provide for the manpower requirements of the RSA and the self-realization of its inhabitants, and
- (e) a programme for making available education of the same quality for all population groups.

The investigation must be conducted in the light of, among other things, the present educational situation, the population composition in South African society and the means that can be made available for education in the national economy. The investigation must cover all levels of education, i.e. pre-primary, primary, secondary and tertiary."

In accordance with the South African Plan for Research into the Human Sciences, the following plan of action was decided on.

- (a) Prof. J.P. de Lange, Rector of the Rand Afrikaans University would be appointed as research leader.

- (b) After the necessary consultation a high-level co-ordinating committee would be appointed to guide and co-ordinate the investigation and guarantee its scientific character. Members of the committee would include representatives of interested government departments, the private sector as well as eminent scientists from all the disciplines able to make a contribution to the development of education.
- (c) Representatives of education institutions would be invited to serve on the subcommittees and work groups of the investigation.
- (d) All population groups would be involved in the co-ordinated conduct of the investigation.
- (e) The investigation would be conducted in a spirit of positive co-ordination, i.e. the available research manpower both within and outside the HSRC and all research activities which had either already been concluded or were still going on, would be included in the investigation on a basis of voluntary co-operation.
- (f) The HSRC would undertake parts of the investigation itself, but would for the greatest part make its research structure available to contract researchers for the investigation.
- (g) Priority would be given to the most pressing problem areas so that the investigation could be expedited and interim reports submitted to the Cabinet in good time.
- (h) Where applicable, alternative solutions for problems in education would be submitted.

THE MAIN COMMITTEE

The Main Committee of the Investigation into Education, whose members were appointed by the Council of the HSRC, was as follows:

Prof J.P. de Lange (Chairman)	Rector, Rand Afrikaans University
Prof A.N. Boyce	Rector, Johannesburg College of Education

Dr S.S. Brand	Head, Financial Policy, Dept of Finance
Dr R.R.M. Cingo	Inspector of Schools, Kroonstad East Circuit, Dept of Education and Training
Dr J.G. Garbers	President, Human Sciences Research Council
Mr J.B. Haasbroek	Director, SA Institute for Educational Research, HSRC
Dr K.B. Hartshorne	Centre of Continuing Education, University of the Witwatersrand
Prof J.H. Jooste	Director, Transvaal Education Department
Prof S.R. Maharaj	Dean, Faculty of Education, University of Durban-Westville
Dr P.R.T. Nel	Former Director, Natal Dept of Education; Dept of Indian Education
Prof A.C. Nkabinde	Principal, University of Zululand
Mr R.D. Nobin	Inspector of Education, Dept of Internal Affairs (Indian Affairs)
Mr M.C. O'Dowd	Anglo-American Corporation of SA Ltd
Mr A. Pittendrigh	Director, Natal Technikon
Miss C.C. Regnart	Westerford High School
Dr P. Smit	Vice-President, HSRC
Mr F.A. Sonn	Director, Peninsula Technikon, President, Union of Teachers' Associations of SA
Mr J.F. Steyn	Chief Secretary, Tvl. Onderwysersvereniging; Secretary, Federal Council of Teachers' Associations
Prof N.J. Swart	Vice-Rector, Potchefstroom University for Christian Higher Education
Mr L.M. Taynyane	President, Transvaal United African Teachers' Association
Dr P.J. van der Merwe	Deputy Director-General, Dept of Manpower; Deputy Chairman: National Manpower Commission
Prof. R.E. van der Ross	Principal, University of the Western Cape
Prof F. van der Stoep	Dean, Faculty of Education, University of Pretoria
Prof N.T. van Loggerenberg	Dean, Faculty of Education, University of the OFS; Chairman, SA Teachers' Council for Whites
Dr R.H. Venter	Director, Univ. Affairs, Dept of National Education
Prof W.B. Vosloo	Head, Dept of Political Science and Public Administration, University of Stellenbosch

After the investigation had been in progress for some months, a request was received from the Department of National Education of South West Africa that it be granted observer status on the Main Committee - this was approved.

From the fifth meeting of the Main Committee Mr J.A. de Jager, Secretary of the Department, therefore also attended meetings of the Main Committee.

At the beginning of the investigation Dr S.W.H. Engelbrecht was appointed secretary and Dr F.P. Groenewald co-ordinator of the investigation. In due course the secretariat was expanded with the appointment of Dr D.J. van den Berg, after which the above-mentioned three persons acted as secretary-co-ordinators. Mr C.P. Serfontein was later appointed assistant co-ordinator. During the last phase of the investigation the secretariat was further expanded when Prof J. McG. Niven of the University of Natal was seconded to the HSRC for three months, from February to May 1981, The administrative staff consisted of Mrs I.S. Samuel, Mrs A. van der Lingen, Miss J.M.M. Botha, Mrs S. van der Walt and other temporary staff.

OPERATIONALIZATION OF THE RESEARCH REQUEST

The operationalization of the research request resulted in the establishment of 18 work committees each being responsible for a different aspect of education. Although all the work committees were not identified at the first meeting, the following work committees were eventually established. (For each work committee the name of the Chairman is given who in all cases had to be a member of the Main Committee. The Chairman of the Main Committee is ex officio member of all the work committees.)

Educational principles and policy	Prof F. van der Stoep
Educational management	Dr K.B. Hartshorne
Education financing	Dr S.S. Brand
Education system planning	Mr J.B. Haasbroek
Curriculum development	Prof F. van der Stoep
Guidance	Miss C.C. Regnard
Education for children with special educational needs	Dr J.G. Garbers
Building services	Mr F.A. Sonn
Health, medical and paramedical services	Mr R.D. Nobin
Demography, education and manpower	Dr P.J. van der Merwe
Teaching of the natural sciences, Mathematics and technical subjects	Mr J.B. Haasbroek

Recruiting and training of teachers	Prof N.T. van Loggerenberg
Innovation strategies in education	Prof W.B. Vosloo
A programme for education of equal quality	Prof R.E. van der Ross
Legal matters	Mr M.C. O'Dowd
Educational technology	Mr A. Pittendrigh
Language and language instruction	Dr P.R.T. Nel
Education bibliography	

Only in the case of the last work committee was a chairman not appointed from the Main Committee. Miss H.J. Otto of the HSRC library compiled the bibliography for each of the work committees.

During the last stages of the investigation a synthesis committee was appointed to consolidate especially the work of three work committees, namely Education management, Education system planning and Education financing. The Chairman of the Main Committee of the investigation into Education was appointed chairman of the synthesis committee.

THE FIELD OF THIS REPORT AND THE COMPOSITION OF THE WORK COMMITTEE

This report deals with the activities of the Work Committee: Education for children with special educational needs. The work committee was composed of the following persons:

Dr J.G. Garbers (Chairman)	Human Sciences Research Council
Dr S. Biesheuvel	University of the Witwatersrand
Dr C. de M. Cloete	Natal Education Department
Mr R. Francis	Department of Internal Affairs (Coloured Affairs)
Dr J. Hamilton	Department of National Education
Dr D.B. Laubscher	Human Sciences Research Council
Mrs M. Makhudu	Thabifong Pre-primary School, Soweto
Mrs F. Muller	Freda Muller School
Dr G.K. Nelson	National Institute for Personnel Research, CSIR
Prof. J.H. Robbertze	Medical University of Southern Africa
Mr P.B. Singh	Department of Internal Affairs (Indian Affairs)
Prof. A. Ramphal	University of Durban-Westville
Dr M. Skuy	University of the Witwatersrand
Prof. M.C.H. Sonnekus	University of Pretoria
Prof. G. Stander	University of Stellenbosch
Dr A.E. Strydom	Human Sciences Research Council
Prof. I.J.J. van Rooyen	University of Pretoria
Dr S.W.H. Engelbrecht (Secretary)	Human Sciences Research Council

The work committee held meetings on the following dates:

Thursday	16 October 1980
Monday	24 November 1980
Thursday	29 January 1981
Tuesday	26 May 1981
Saturday	6 June 1981
Wednesday	24 June 1981

Already during the first meeting of the work committee the field of research was operationalized and the following research themes were distinguished. Work committee members were appointed to research the different themes or to co-ordinate the research:*

* For a complete exposition see Chapter 1, Par. 1.3

- . The problem concerning culturally and environmentally deprived children (Dr S. Biesheuvel and a work group)
- . Education for handicapped children outside the mainstream of regular education (Prof. G. Stander and a work group)
- . Education for scholastically impaired children, i.e. children with learning problems in the mainstream of education. (Prof. M.C.H. Sonnekus and a work group)
- . Definitions of post, training and provision of specialists concerning the education of children with special educational needs (Dr J.G. Garbers and a work group)
- . The design of guidelines for the integration of the provision of education for pupils with special educational needs within the total educational system. (Dr J. Hamilton)
- . Parent involvement in the education of impaired and handicapped children (Dr A.E. Strydom and a work group)
- . Provision of education for the highly gifted (Dr G.K. Nelson and a team of researchers of the National Institute for Personnel Research of the (CSIR)

These research themes became more refined in the course of time in particular research projects carried out, of which the results were published in February 1981. By means of the operationalization of the field of research a scheme was drawn up for the report of the work committee. Dr J.G. Garbers and Dr S.W.H. Engelbrecht were requested to write the report of the work committee.

VOTE OF GRATITUDE FOR CO-OPERATION

Various persons and institutions made valuable contributions to the research project. In this respect the contact persons at the various educational authorities come to mind. They were always prepared and willing to supply any particulars required. Valuable assistance was also given by many other people involved in the project as chief co-workers, assistant co-workers and co-workers. The contributions received in the form of proposals and memoranda could be profitably incorporated into the investigation (see Appendix).

EDUCATION FOR CHILDREN WITH SPECIAL EDUCATIONAL NEEDS

CHAPTER 1

INTRODUCTION AND ORIENTATION

1.1 PREMISES AND DELIMITATIONS

Every child has the right to be cared for and to receive education irrespective of his sex, race, aptitude, interests or abilities. It is obviously also true of the handicapped and scholastically impaired child, or a child with other characteristics that cause his daily teaching in the classroom to become problematic. These children can therefore be qualified as children with particular educational needs.

Obviously every child requires special attention and handling. However, it is true that impaired and handicapped children have to be provided with special educational services for longer or shorter periods, in order to satisfy their particular educational needs.

The provision of education for these children (handicapped, scholastically impaired and highly gifted) in a specific country, is a test on the one hand for the educational system that should be sufficiently differentiated and nuanced to meet with the great variety of educational needs. On the other hand it is a test for a specific community that in its provision of education, it will have to prove its sensitivity to the educational needs of all its children, including the handicapped and impaired. On the reverse side of the spectrum there are those pupils whose achievements are so outstanding that a great injustice is done to these highly gifted pupils in the regular classroom teaching programme. These pupils therefore require special attention.

The work committee responsible for this report investigated the education of these children in the RSA.

The following premises were accepted in this investigation:

The focus is on the education of the child with particular educational needs (handicapped, impaired and highly gifted) and not on the educational system. The system should be instrumental in providing education that will satisfy the needs of scholastically impaired, handicapped and highly gifted children to their best advantage.

Children with particular educational needs should be kept in the mainstream of education while provision should be made in parallel educational streams for children with exceptional educational needs. The movement of pupils between main and parallel streams should always be possible. Since the handicapped or impaired child eventually has to find his way and establish himself as an adult in the community, where he should be as independent as possible, the aim is to keep the handicapped and impaired, insofar it is educationally justifiable, in the mainstream of education.

In addition to this the aims pursued in the education of children with particular educational needs should be identical to those of the normal child, namely to assist impaired and handicapped children to realize their potential, to increase their standard of living and to be independent adults so that they in turn will be able to make a contribution towards the economic growth of the RSA (see research request of the Cabinet).

Even if the aims pursued in the education of the handicapped and impaired child are essentially identical to those for any other child, the resistance they experience in their education is much more severe, the personnel and necessary infrastructure involved in the education of these children needs to be more comprehensive and more specialized, and in the same way it is more difficult to attain success.

It is therefore clear that the introduction of educational provision for impaired and handicapped children should form an essential part of the HSRC's Investigation into Education. It will also become clearer that it is a field that is exceptionally complex, specialized and varied, and that there are direct implications regarding the investigation as a whole for, inter alia, the design of an educational system, its management and financing.

However, it is particularly important to indicate the contact points between the field of activities of the Work Committee: Education for children with special educational needs (WCECSEN) and those of other related work committees. The field of activities of this committee should be in particular distinguished from that of the Work Committee: Guidance, and the Work Committee: Health, medical and paramedical services.

Regarding the activities of the Work Committee: Guidance, the pattern for the distribution of work followed was: Work Committee: Guidance will investigate

the non-pedo or psychotherapeutic field and will be concerned with the total action of preventative and future-oriented guidance - i.e. guidance of children to realize their potentialities most effectively within a given situation and with the available educational facilities. This work committee should therefore be mainly concerned with the "normal" child who has no special educational needs.

The activities of the Work Committee: Health, medical and paramedical services had important levels of contact with the Work Committee: Education for children with special educational needs (WCECSEN) as will be shown. As a matter of fact, the field of the WCECSEN contained implications for virtually all the other work committees.

1.2 TERMINOLOGY

Children with special educational needs can be divided into two groups: on the one hand the scholastically impaired and the handicapped, while in addition there are the highly gifted children who cannot be regarded as either impaired or handicapped, but who nevertheless have special educational needs. In addition there are a few other concepts that have to be described more fully at this stage.

1.2.1 The handicapped child is subjected to aggravating conditions and is restricted or handicapped by a deficiency regarding his particular potential that can be pointed out (e.g. deafness, epilepsy, blindness) or a marked deficiency in respect of his educational situation (e.g. poor conditions at home, environmental deprivation) (Van Niekerk, 1981: 3; Sonnekus, 1981: 4). These aggravating conditions find expression in scholastic impairment so that these children cannot hold their own in the mainstream of education.

Children with the following handicaps have been included in this investigation:

1. The deaf child
2. The hard-of-hearing child
3. The partially hearing child
4. The blind child
5. The partially sighted child
6. The deaf-blind child
7. The physically handicapped child
8. The mentally handicapped educable child
9. The mentally handicapped trainable child

10. The mentally handicapped special care child
11. The neurologically/cerebral palsied child
12. The neurologically/epileptically handicapped child
13. The neurologically Group C specific learning disabled child
14. The neurologically/brain-injured handicapped child
15. Autistically handicapped child
16. Pedagogically neglected special care child
17. Pedagogically neglected juvenile delinquent
18. Pedagogically neglected emotionally based behaviour deviant child
19. Psychologically seriously disturbed child
20. Aphasically/linguistically handicapped child
21. Genetically handicapped child

The above-mentioned categories of handicapped children cannot inter alia owing to their aggravating conditions, sufficiently realize their potential which in comparison to the non-handicapped child might be a limited potential. Therefore, a handicapped child can be either a scholastically impaired child or not.

1.2.2 The scholastically impaired child is an underachiever. Any child who does not achieve scholastically as he should in terms of his achievement potential, is scholastically impaired. Both handicapped and non-handicapped children can therefore be scholastically impaired. The scholastic impairment can be present on the one hand as underachievement in scholastic skills (e.g. reading, spelling, writing, arithmetic) and on the other, as underachievement in specific subjects or subject groups (e.g. content subjects, languages, natural science subjects).

Scholastic impairment in the handicapped as well as the non-handicapped child always bears some relationship to problems in the educational situation of the learner, who in principle can possibly be assisted by remedial teaching.

The scholastically impaired child finds himself in the mainstream of education. However, the handicapped child in special education can also be similarly scholastically impaired.

1.2.3 The highly gifted child is the child who, in comparison to other pupils, attains exceptional achievements (Haasbroek and Jooste, 1981: 108). Being highly gifted is a characteristic of a person as a whole and is not restricted to his intellect. Intellectually highly gifted pupils are those who do exceptionally well in all their subjects. Specifically highly gifted pupils on the other

hand are those who do exceptionally well in one or a few subject(s) or some school activity. These pupils are also referred to as talented pupils (Haasbroek and Jooste, 1981: 109-111). These pupils are characterized by the fact that they possess an exceptionally high intellectual ability and normally do exceptionally well. They possess an exceptionally advanced language ability, mathematical ability, artistic, musical and mechanical ability and do exceptionally well in these fields. They reveal reasoning ability and creativity, possess leadership potential, do well in sport, reveal particular personal qualities but are often underachievers because they do not realize their potential (Haasbroek and Jooste, 1981: 11). To realize the highly gifted child's potential is a formidable educational task and the danger always exists that his potential will not come to fruition. It is particularly the case when these children find themselves in the normal class situation in which they are not sufficiently challenged and their social relationships also are not developed.

1.2.4 Education

The term "education" as used in this report, includes education in all its dimensions, and comprises normal, special, remedial and compensatory education, all forms of supporting services as well as training and care at training centres and institutions for mentally seriously and severely handicapped children.

1.2.5 Special education

Special education is education of a specialized nature outside the normal mainstream and includes in addition

- . the psychological, medical, dental, paramedical and therapeutic treatment (with the inclusion of the performance of operations),
- . the provision of artificial medical aids and apparatus,
- . the care in a hospital and a school hostel, and
- . the provision of transport and physical care.

1.2.6 Differentiated education

Differentiated education is based on the philosophy of the equality of all pupils, the recognition of individual differences and the right of every pupil to receive education according to his unique educational, physical, emotional and spiritual needs and potential.

The basis is that differentiated education should be provided in accordance with the ability, aptitude and interest of every pupil and the requirements of the country. This also implies that suitable guidance be provided so that differentiated education can lead to the development of every pupil to the maximum of his potential.

The normal education as well as the special and other educational forms of a specialized nature are important facets of the same differentiated educational system and provision is made for all these forms of education within a broad educational structure in a pedagogically justifiable manner.

1.2.7 Mainstream education

Mainstream education refers to the fundamental educational philosophy aimed at accommodating the handicapped pupil as far as possible in the mainstream of regular education (i.e. in the same school) before considering transfer to special education.

1.2.8 Compensatory education

Compensatory education specifically refers to those educational efforts to abolish educational backlogs as a result of deprivation.

1.2.9 Remedial education

Remedial education is specialized corrective assistance provided by education departments for pupils who are scholastically impaired and/or with specific handicaps.

1.2.10 School

A school is an educational institution or that part of such an institution where education, with the inclusion of pre-primary education, is provided up to a standard not higher than Std 10, and is maintained, managed and subsidized by an educational authority.

1.2.11 Children's Act school

Children's Act schools are educational institutions established in accordance with the law and under the control of education departments. There are two kinds of Children's Act schools namely industrial schools for the neglected special care child and reform schools for the committed juvenile delinquent.

1.2.12 Reform school

A reform school is a Children's Act school for pedagogically neglected committed juvenile delinquents.

1.2.13 School of Industry

A school of industry is a Children's Act school for pedagogically neglected committed special care children.

1.2.14 Training centre

A training centre is an educational institution for non-scholastically educable, but trainable mentally seriously handicapped children with an IQ of approximately 25-50.

1.2.15 Auxiliary services

The aim of the auxiliary services of the education departments is to improve the physical welfare and growth and mental health of schoolchildren by helping them to realize the optimum educational, physical, emotional and spiritual development in relation to their abilities and circumstances. These supporting services include

- a psychologist and school guidance service, and
- a school medical and paramedical service.

1.2.16 School clinic

School clinics (also called school psychological clinics, school guidance clinics or simply clinics) are separate functioning auxiliary service units geographically spread over the various provinces in order to provide the most efficient service.

The school clinic staff is basically responsible for the identification, evaluation, provision of assistance, placement and referral of pupils presenting problems. The staff of the school clinic work together as a multidisciplinary team.

1.2.17 Clinic school

The clinic school is a supplementary auxiliary service school where education of a more therapeutic nature is provided to seriously emotionally maladjusted and behaviour deviant pupils. Both primary and secondary school pupils are accommodated in the various clinic schools on a differential basis, inter alia according to scholastic and mental abilities, where they can be re-educated.

1.2.18 School medical service

The school medical service is a specialized auxiliary service at schools. Although interdepartmental differences exist concerning organization, modus operandi, and so forth, efficient medical services are available to all pupils. The staff usually consist of a chief medical inspector, medical inspectors and school nurses. The aim of the service is mainly to identify pupils with physical defects. Medical inspections are held regularly at all schools, from pre-primary to secondary level. Special attention is given to aural and visual defects as well as neurological phenomena. As soon as any physical defects or deviations are identified, the pupil is referred to the parents, specialists at the school clinic for the necessary attention and treatment, for further examination or for correct educational intervention with a view to providing for his physical and/or educational needs.

1.2.19 School guidance

School guidance is provided to school children by all education departments. The guidance is presented by specialized staff at the school, as well as the staff at school clinics. The guidance at pre-primary level is managed by travelling school clinic staff when requested to do so. At primary level, principals, departmental heads and class teachers (tutor teachers) provide general guidance to pupils according to their educational needs. Pupils with more serious guidance problems are referred to school clinics for more intensive attention.

At secondary level school guidance, which includes vocational guidance, is presented on a more intensive and structured basis by departmental heads, guidance teachers (teacher psychologists) according to a specific guidance programme. This specialized staff at schools is assisted by the school clinic staff.

1.2.20 Environmental deprivation

Environmental deprivation points to deficiencies in the material socioeconomic circumstances and the educational set-up of the child, with resulting deprivation or retardation in respect of those experiences that are conditions for progress at school.

1.2.21 Educability, trainability, dependability

Educability points to the pupil's ability to benefit from regular and remedial education. This is determined by the school staff and the available auxiliary services on the one hand and the child's mental as well as physical abilities on the other hand.

Trainability points to the ability of a seriously mentally handicapped child who is exempt from compulsory education, but who nevertheless, according to the judgement of the education department concerned, will benefit from a training programme. This also includes the physical care of such a child. In terms of mental ability, the seriously mentally handicapped child will be one with an IQ of + 25 - 50.

The trainable child can be taught a great deal although this is a long, slow process. However, he will learn very little informally or by chance and what he learns usually has to be presented to him as a separate experience until he has mastered it. That which is newly learnt, is again dependent on what was learnt beforehand. The subject-matter is therefore presented in a systematic and programmed manner.

The dependent child refers to that child who is not able to benefit from any educational or training programme and is mainly dependent on physical care in an institution.

1.3 OPERATIONALIZATION AND EXECUTION OF THE INVESTIGATION

1.3.1 Global operationalization

The WCECSEN followed the following train of thought in the analysis of its assignment and the operationalization of the problem area.

Children with special educational needs can be divided into those who have to be accommodated in the mainstream of education and those who have to be accommodated outside the mainstream of education. In the mainstream of education the focus obviously falls on the scholastically impaired (see 1.3.2) on the one hand and the highly gifted pupils (see 1.3.3) on the other hand. These two categories have therefore been investigated separately. So far as pupils outside the mainstream of education are concerned, it was necessary to conduct an extensive investigation in respect of handicapped pupils who constitute a varied group with specific educational needs and who also include highly gifted children (see 1.3.4).

The environmentally deprived child constitutes a fundamental problem in the RSA. Its scope is such, especially in the case of Black pupils, that it

has far-reaching implications for the educational system as a whole. A special investigation was devoted to the provision of education for environmentally deprived pupils (see 1.3.5).

Where parent involvement in the education of every child is of vital importance, it is even more so in the case of the handicapped, scholastically impaired, environmentally deprived and highly gifted pupils. Consequently the problem has been specifically singled out (see 1.3.6).

The particular multi-faceted problem which is created by the provision of education for the child with special educational needs, must necessarily be reflected in educational management. Since flexible transition of pupils in and out the mainstream of education should be brought about, the integration of educational provision for pupils with special educational needs within the total educational system was investigated (see 1.3.7).

Specialized personnel of a wide range and variety are involved in the education of pupils with special educational needs. This matter was also specially investigated (see 1.3.8).

The provision of physical facilities for the education of children with special educational needs is obviously of vital importance. Since the necessary progress had not been made regarding norms for the provision of school buildings, it was decided, in view of the time available for this investigation and the fact that the Work Committee: Building services was engaged in the establishment of norms for school buildings, to first await these recommendations and not to continue with the investigation regarding physical facilities for children with special educational needs. This is an extensive investigation of a very specialized nature.

1.3.2 The scholastically impaired pupil

A subcommittee of the WCECSEN was instructed to carry out the investigation on the scholastically impaired pupil and consisted of
Prof. M.C.H. Sonnekus (University of Pretoria (Chairman))
Dr S.W.H. Engelbrecht (Co-ordinator, HSRC Investigation into Education)
Dr D.B. Laubscher (HSRC)
Mrs F. Muller (Head, Freda Muller School)

Mr P.B. Singh (Department of Internal Affairs (Indian Affairs))
Dr M. Skuy (University of the Witwatersrand)
Miss A.C. Boucher (University of Pretoria, Secretary).

The problem area of the scholastically impaired child was further operationalized by this subcommittee and the following research tasks were assigned to the following contractors:

- 1) Prof. P.A. van Niekerk (with the co-operation of Dr A.S. du Toit, Miss A.C. Boucher and Mrs A. van der Merwe) University of Pretoria:
 - . Definition of and criteria for the identification of scholastically impaired children
 - . Aims of the education of scholastically impaired children
 - . The early identification of and assistance to scholastically impaired children
 - . Recruiting, selecting and training of teachers for scholastically impaired children
 - . Guidelines for diagnosis, inter alia by professional staff of scholastically impaired children and the design of remedial educational programmes for implementation by the teacher.

An extensive investigation was made and a report Provision of education for scholastically impaired children (176 pages) was submitted. During the investigation, a number of schools (19), universities and training colleges (6), clinics (7) and education departments (8) were visited and sixty-three educational leaders in this specific field were interviewed and available policies and information documents were consulted.

- 2) Dr L. Zaaiman (College of Education, Pretoria):

The incidence of scholastically impaired children in respect of the different population groups (children who have to be taught in separate schools) and the present provision of education. So far as provision of education is concerned, this involves a survey in the government sectors of:

 - . physical provision of education
 - . separate schools for scholastically impaired children
 - . separate classes for scholastically impaired children

- . the teacher-child scales in schools and classes for scholastically impaired children
- . qualifications, requirements and service conditions of teachers of scholastically impaired children.

Oral and written enquiries were made at five education departments for Whites, as well as at the education authorities for Indians and Coloureds, the Department of Education and Training and the education departments of the national states. Satisfactory co-operation was received from all the institutions.

The enquiries were particularly directed towards the incidence of children with learning impairments, the present system of rendering assistance, provision of staff, adequacy of physical amenities and factors that limit the adequacy of provision of assistance.

With regard to provision of assistance by state-supported institutions, a questionnaire was sent to all universities, colleges of education and large hospitals. Information was gathered concerning the number of children who were assisted, the adequacy of facilities, qualifications of staff, fees imposed and the number of children who had to be turned away.

A report, Incidence and present provision of education for scholastically impaired children in the mainstream of education and investigation regarding remedial aid given by state-supported institutions (57 pages) was submitted.

- 3) Dr M. Skuy (with the co-operation of Mrs Jan Muller, Mrs Jean McKenzie, Miss Karen Kaplan, Miss Lesley Clarke, Mrs Sheila Cohen (University of the Witwatersrand), Mrs F. Muller en Dr S.W.H. Engelbrecht (HSRC) , investigated the actual and potential contribution of private institutions (schools, clinics, individuals in practice, organizations, etc.) to the education of scholastically impaired children.

A survey was made in the private sector of private schools as well as private schools more specifically related to remedial teaching, private practitioners (including remedial teachers, occupational and speech therapists as well as psychologists). In this survey 500 schools and 850 individuals were involved and comprehensive information was gathered from them with regard to remedial programmes that are presented. Of the questionnaires sent out 58 % were returned.

A report, A study of remedial facilities in the private sector of South Africa (105 pages) was received.

- 4) Prof. M.C.H. Sonnekus (University of Pretoria) and chairman of the subcommittee that had to investigate the scholastically impaired child consolidated these last three reports into one report: The scholastically impaired child (157 pages).

1.3.3 The highly gifted child

The investigation concerning the education of the highly gifted pupil was undertaken by the National Institute for Personnel Research (NIPR) of the Council for Scientific and Industrial Research (CSIR) under the leadership of the WCECSEN member and director of the NIPR, Dr G.K. Nelson.

The research team consisted of M. Mackay (leader) and the following co-workers: B.L. Visser, A. Painter, J.M. Verster, A. Gordon and A.P. Moerdijk.

The following report was submitted: The gifted child in South Africa: A short historical synopsis with recommendations concerning future research (85 pages).

A report regarding the highly gifted child that became available during the investigation but was not part of the activities of the WCECSEN, could be used to good advantage, namely Haasbroek, J.B. and Jooste, J.H. 1981: The identification of highly gifted pupils with reference to educational programmes and the training of teachers. Pretoria (HSRC).

1.3.4 The handicapped pupil

The following task was assigned to a subcommittee of WCECSEN: To investigate the present situation and to make recommendations with regard to future provision of education for the handicapped child outside the mainstream of regular education in the Republic of South Africa.

The following subcommittee was appointed:

Members of WCECSEN

Prof. G. Stander (University of Stellenbosch, Chairman)
Dr C. de M. Cloete (Natal Education Department)
Mr R. Francis (Department of Internal Affairs (Coloured Affairs))
Dr J.H. Hamilton (Department of National Education)
Dr G.K. Nelson (Director, NIPR, CSIR)
Mr P.B. Singh (Department of Internal Affairs (Indian Affairs))

Co-opted members

Dr M.V. Bührmann (Red Cross Memorial Children's Hospital (Cape Town))
Mrs M.M. Golding (Department of National Education)
Mr M. Gouws (HSRC, Chief Research Officer)
Prof. C. de H. Murray (University of South Africa)
Mr C. van Niekerk (HSRC)

On account of the particular nature of their assignment this subcommittee had to appoint a separate work group for each of the different handicaps. The following work groups carried out the research:

1) The deaf child

Chief co-worker

Mr J.L. Badenhorst, Inspector of Education, Department of National Education.

Assistant co-workers:

Mr C.M. Bassa, Chairman, Indian Division of National Council for the Deaf

Prof C.J. Du Toit, Head, Department of Otorhinolaryngology,
Tygerberg Hospital
Dr H.J.T. Steyn, Head, Transoranje School for the Deaf
Mr J.A. van der Merwe, Inspector, Sensory handicapped pupils,
Department of Education and Training
Miss B.K. Williams, Inspectress, Department of Education Cape of
Good Hope

2) The hard-of-hearing child

Chief co-worker:

Mr J.L. Badenhorst, Inspector of Education, Department of National
Education

Assistant co-workers

Mr C.M. Bassa, Chairman, Indian Division of National Council for
the Deaf
Prof. C.J. du Toit, Head, Department of Otorhinolaryngology,
Tygerberg Hospital
Dr H.J.T. Steyn, Head, Transoranje School for the Deaf
Mr J.A. van der Merwe, Inspector, Sensory handicapped pupils,
Department of Education and Training
Miss B.K. Williams, Inspectress, Department of Education Cape of
Good Hope

3) The partially hearing child

Chief co-worker:

Mr J.L. Badenhorst, Inspector of Education, Department of National
Education

Assistant co-workers

Mr C.M. Bassa, Chairman, Indian Division of National Council for
the Deaf
Prof C.J. du Toit, Head, Department of Otorhinolaryngology,
Tygerberg Hospital
Dr H.J.T. Steyn, Head, Transoranje School for the Deaf

Mr J.A. van der Merwe, Inspector, Sensory handicapped pupils,
Department of Education and Training
Miss B.K. Williams, Inspectress, Department of Education Cape of
Good Hope

4) The blind child

Chief co-worker:

Prof. T. Pauw, Lecturer, University of South Africa, Pretoria
(Previously head: School for the Blind)

Assistant co-workers:

Mr P.P. Peach, Head, Prinshof School for Partially Sighted
Mr J. van der Poel, Head, School for Blind Coloureds.

5) The partially sighted child

Chief co-worker:

Prof T. Pauw, Lecturer, University of South Africa
(Previously head: School for the Blind)

Assistant co-workers

Mr P.P. Peach, Head, Prinshof School for Partially Sighted
Mr J. van der Poel, Head, School for Blind Coloureds.

6) The deaf-blind child

Chief co-worker:

Prof T. Pauw, Lecturer, University of South Africa
(Previously head: School for the Blind)

Assistant co-workers:

Mr P.P. Peach, Head, Prinshof School for Partially Sighted
Mr J. van der Poel, Head, School for Blind Coloureds.

7) The Physically handicapped child

Chief co-worker:

Mr C.D. Theron, Inspector of Education, Department of National Education

Assistant co-workers:

Dr J.M. de Nysschen, Head, Elizabeth Conradie School

Mr W.H. Karstel, Inspector of Education, Department of National Education

8) The mentally handicapped educable child

Chief co-worker:

Prof T. v. B Vaughan, Department of Empirical Education, University of South Africa

Assistant co-workers:

Mr J.P. Bekker, Inspector, Special Education, Department of Internal Affairs (Indian Affairs)

Mr G.N. Chatty, Department of Special Education, University of Durban-Westville

Mr B. Olivier, Assistant Head, Psychological Services, Department of Education Cape of Good Hope

9) The mentally handicapped trainable child

Chief co-worker:

Mr J.J. Grobelaar, Educational planner, Department of National Education

Assistant co-workers:

Mrs H.A. Marais, Head, Jannie Brink Training Centre

Mr F.J. Muller, Head, Psychological Services, Education Department SWA

Mr N.F. van Dyk, Inspector of Education, Department of National Education

10) The mentally handicapped special care child

Chief co-worker:

Prof. V. Grover, Alexandra Care and Rehabilitation Centre

Assistant co-workers:

Mrs L. Lipman, Head, The Hamlet Training Centre

Mrs E. Steenkamp, Alta du Toit Centre

11) The neurologically handicapped/cerebral palsied child

Chief co-worker:

Dr J.A. Rossouw, Head, Murial Brink School

Assistant co-workers:

Dr L.J. Arens, Vista Nova School

Mr E.R. Barker, Head, Paarl School

12) The neurologically/epileptically handicapped child

Chief co-worker:

Mr L. Raubenheimer, Head, Jan Kriel School

Assistant co-workers:

Dr P.H. du Preez, Educational Planner, Department of National Education

Mr P.S. Kunneke, Senior School Psychologist, Jan Kriel School

Mr W. van Dyk, Head, Transvalia School

13) The neurologically/Group C Specific learning disabled child

Chief co-worker:

Prof. W.L. Steenkamp, Director, Institute for Personal Guidance,
University of the Western Cape

Assistant co-workers:

Mr H.C. Boshoff, Head, Cape Recife School

Prof. T.R. Botha, Director, Institute for Child and Adult Guidance,

Rand Afrikaans University.

Mr D.R. Donald, Faculty of Education, University of Cape Town

Prof. H.B. Kruger, Potchefstroom University for CHE

Mr D.A. Martin, Head, Vista Nova School

Mr D.S. Potgieter, Head, New Hope School

14) The neurologically/brain-injured child

Chief co-worker:

Dr A.P. Rossouw, Neurologist, Pretoria

Assistant co-workers:

Dr W.M. Guldenpfennig, Neurologist

Dr P.M. Leary, Paediatrician, Red Cross, Memorial Childrens' Hospital

15) The infantile autistically handicapped child

Chief co-worker

Mrs M.M. Golding, Head of Department, Autism, New Hope School

Assistant co-workers:

Dr M.V. Bührmann, Psychiatrist, Red Cross Memorial Childrens' Hospital

Mr M. van Rooyen, Head, Vera School

16) The pedagogically neglected special care child

Chief co-worker:

Dr H.J.L. van Deventer, Inspector of Education, Department of National Education

Assistant co-workers:

Dr A.M. Griesel, Head, Petra Girls' School

Dr P.M. Heyns, Department of Psychology, Rand Afrikaans University

Dr J.A. Malan, Faculty of Education, University of Stellenbosch

Mr S.C. Roberts, Head, J.W. Luckhoff School

17) The pedagogically neglected juvenile delinquent

Chief co-worker:

Dr H.J.L. van Deventer, Inspector of Education, Department of National Education

Assistant co-workers:

Mr J.H. du Toit, Clinical Psychologist, Tygerberg Hospital
Prof. J.C. Kok, Faculty of Education, Rand Afrikaans University
Mr A.G. Smit, Faculty of Education, University of Stellenbosch
Mr G.D. van Dyk, Head, Emmasdal School

18) The pedagogically neglected emotionally or behaviourally deviant child

Chief co-worker:

Dr C. de M. Cloete, Head Psychological Services, Natal Educational Department

Assistant co-workers:

Mr C.P. Cillie, Head, Child Guidance Clinic, Natal Education Department
Dr J.F.J. Jonker, Head, Durban School Psychologists Centre
Prof. A. Nel, University of Zululand

19) The psychologically seriously disturbed child

Chief co-worker:

Dr L. Schiebusch, Chief Clinical Psychologist, Addington Hospital

Assistant co-workers:

Dr J. Anderson, Psychiatrist, Red Cross Memorial Childrens' Hospital
Dr J. Gilliland, Department of Health
Dr B.A. Robertson, Psychiatrist, Red Cross Memorial Childrens' Hospital

20) The aphasically/linguistically handicapped child

Chief co-worker:

Dr I. Uys, Department of Speech Therapy, University of Pretoria

Assistant co-workers:

Prof.M.L. Aron, Head, Speech and Hearing Clinic, University of the Witwatersrand

Mrs P. Behr, Speech Therapist

Dr J.J. du Preez, Faculty of Education, University of Stellenbosch

Mrs J. Price, Head, Crossroads Private School

21) Genetic impairments:

Chief co-worker:

Dr J. Op't Hof, Head, Genetic Services, Department of Health, Welfare and Pensions

Assistant co-workers:

Dr A.E. Strydom, Assistant Director, S.A. Institute of Educational Research, HSRC

Dr G. Urbani, S.A. Institute for Educational Research, HSRC

22) Statistical range of handicaps and projections

Chief co-worker:

Mr C. van Niekerk, S.A. Institute for Educational Research, HSRC

Assistant co-workers:

Mr D.J. Bezuidenhout, S.A. Institute for Educational Research, HSRC

Mr P.J.T. Hamman, S.A. Institute for Educational Research, HSRC

An extensive report in three parts The education of the handicapped child outside the mainstream of normal education was submitted. Only a very small section of the findings of this investigation will be represented in this summarized report. The findings of this comprehensive report will be published separately and made available.

1.3.5 The environmentally deprived child

The particularly extensive and complicated problem area of provision of education for the environmentally deprived child, especially in a country like the RSA with its poli-cultural set-up and variety of cultural-educational levels, was assigned to the following subcommittee:

Prof S. Biesheuvel (University of the Witwatersrand, Chairman)
Mr R. Francis (Department of Internal Affairs(Coloured Affairs)) (Education)
Mrs M. Makhudu (Head, Thabifong Pre-primary School, Soweto)
Prof A. Ramphal (University Durban-Westville)

A report Environmental disadvantage (46 pages) was prepared.

1.3.6 Parent involvement

An investigation into parent involvement regarding the education of handicapped, scholastically impaired and highly gifted children was assigned to the following subcommittee:

WCECSEN members

Dr A.E. Strydom (S.A. Institute for Educational Research HSRC, Chairman)
Mrs M. Makhudu (Head, Thabifong Pre-primary School, Soweto)
Prof. A. Ramphal (University Durban-Westville)
Prof. M.C.H. Sonnekus (University of Pretoria)

Co-opted members

Miss C. Overbeek (Researcher, SAIER, HSRC)
Dr G. Urbani (Researcher, SAIER, HSRC)

The research was conducted on the basis of a literature as well as an empirical investigation. The latter consisted of a questionnaire investigation concerning heads of schools for handicapped and scholastically impaired pupils of various population groups. The accent in this investigation fell on the nature of the parent involvement rather than on its scope. Consequently as many school types as possible were involved. Questionnaires were sent to the heads of 15 schools for Whites, 7 for Indians, 12 for Coloureds and 8 for Blacks. A response of 74 % was received.

A questionnaire was also sent to parents of children in schools for the handicapped and impaired. Four hundred and twenty questionnaires were circulated to parents and the response was 49 %.

A report compiled by G. Urbani and C. Overbeek: Parent involvement in the education of handicapped and impaired children (79 pages), was submitted.

1.3.7 Implications of the educational system in the provision of education for handicapped and scholastically impaired pupils

This investigation was conducted by Dr J.H. Hamilton (Head, School for the Deaf) as the only member of the WCECSEN. In his investigation he received varied comments on his draft proposals from specialists in this particular field. He also undertook a study of the literature as well as an empirical investigation in which the preferences of both parents and children, who had had the experience of mainstream as well as special education, for these two alternatives were probed. A report: Integration of provision of education for pupils with special educational needs in the total educational system (31 pages) was prepared.

This report was submitted to a number of referees (Prof. M.C.H. Sonnekus, Prof. C.H. de C. Murray and Dr C. de M. Cloete) and the commentary received was included in the final report.

1.3.8 Required professional personnel

The following subcommittee was appointed from WCECSEN:

Dr J.G. Garbers (HSRC, Chairman)

Prof. J.H. Robbertze (MEDUNSA)

Prof. I.J.J. van Rooyen (University of Pretoria)

Dr G. Urbani (researcher, SAIER) carried out the research as co-opted member. The research consisted of a study of the relevant literature and a survey of the present situation in respect of categories professionally concerned with the education of children with special educational needs. The following report was submitted: Definitions of posts, training and provision of professional personnel concerned with the education of and assistance to children with special educational needs (69 pages)

1.3.9 Contact persons in education departments

All educational authorities were approached requesting them to nominate a contact person with whom direct contact could be made with a view to obtaining the required information rapidly. Most of the subcommittees made use of this and exceptionally positive co-operation was received from these persons.

The following contact persons were appointed and rendered valuable assistance:

Ciskeian Education Department: Mr H.K. Nyikana

(alt. Mr J.A. van Niekerk)

Department of Internal Affairs (Indian Affairs): Mr P.B. Singh

(alt. Mr A.K. Singh)

Department of Internal Affairs (Coloured Affairs): Mr J.P. Bekker

Department of Education and Training: Dr H.A. Mocke

Department of Education Cape of Good Hope: Dr C.J. Reyneke

KaNgwane Government Service: Mr M.M. Nxumalo

KwaZulu Education Department: Mr S.B.M. Mdluli

Natal Education Department: Mr T.P.R. Scoggings

OFS Education Department: Mr P.J. Helberg

Transvaal Education Department: Mr H. Moore

1.3.10 Educational principles as framework

As was the case with the other seventeen work committees concerning the HSRC Investigation into Education, the activities of the WCECSEN were also carried out within the framework established by the educational principles as finalized and accepted by the Main Committee of the HSRC Investigation into Education:

PRINCIPLE 1: Equal opportunities for education, including equal standards in education, for every inhabitant irrespective of race, colour, creed or sex, shall be the purposeful endeavour of the State.

PRINCIPLE 2: Education shall afford positive recognition of what is common as well as what is diverse in the religious and cultural way of life and the languages of the inhabitants.

- PRINCIPLE 3: Education shall give positive recognition to the freedom of choice of the individual, parents and organizations in society.
- PRINCIPLE 4: The provision of education shall be directed in an educationally responsible manner to meet the needs of the individual as well as those of society and economic development, and shall, inter alia, take into consideration the manpower needs of the country.
- PRINCIPLE 5: Education shall endeavour to achieve a positive relationship between the formal, non-formal and informal aspects of education in the school, society and family.
- PRINCIPLE 6: The provision of formal education shall be a responsibility of the State provided that the individual, parents and organized society shall have a shared responsibility, choice and voice in this matter.
- PRINCIPLE 7: The private sector and the State shall have a shared responsibility for the provision of non-formal education.
- PRINCIPLE 8: Provision shall be made for the establishment and State subsidization of private education within the system of providing education.
- PRINCIPLE 9: In the provision of education the processes of centralization and decentralization shall be reconciled organizationally and functionally.
- PRINCIPLE 10: The professional status of the teacher and lecturer shall be recognized.
- PRINCIPLE 11: Effective provision of education shall be based on continuing research.

The draft which presents the eleven principles for education in the RSA with regard to the education of children with special educational needs, can be

interpreted as follows concerning a few of the principles:

The implication as regards Principle 1 is that equal provision of education for every inhabitant irrespective of race, colour, creed or sex shall be the endeavour of the State. The constituents mentioned here, namely race, colour, creed and sex are the educationally irrelevant factors when the concept "equal opportunities" is interpreted. On the other hand, however, "special educational needs" imply an educationally relevant matter for educational differentiation and finality will have to be reached in this report, in accordance with the context of Principle 1, regarding problems such as the following:

- . Mainstream education for all pupils or separate education for the child with special educational needs: it is clear that a delicate balance exists when the needs of a child are such that separate amenities are justifiable - compare for example the problem concerning the highly gifted pupil on the one hand and the Group C specific learning disabled pupil on the other hand
- . within the context of differentiated provision of education on the basis of special educational needs the demand for equal opportunities for education in respect of educationally non-relevant factors will still have to be accommodated and the recommendations of this work committee will have to link up with the macro recommendations of the investigation as a whole regarding the settling of differences that have been building up during the years in respect of educationally irrelevant factors.

Principle 3 refers to the matter concerning the choice of parents and the recognition it should be afforded in a system for provision of education. Two matters immediately call for attention regarding children with special educational needs:

On the one hand the principle has always applied to the same extent as for non-handicapped children, namely that this choice of parents is not absolute but varies within certain limitations, sometimes expressed explicitly and sometimes implicitly.

On the other hand the limitations in which the choice of parents can vary, regarding the child with special educational needs, have often been expressed more explicitly because of practical demands. The matter concerning choice of school can be referred to as an example. The parent of a non-handicapped child is subjected to specific zoning regulations on the basis of which a limited choice of school is permitted. These regulations are understandable since a chaotic situation will be created that will be unmanageable for any educational authority. The parent of the child with special educational needs is sometimes confronted with the demand that the circumstances of his child have become such that education outside the mainstream has become essential. Since this matter has caused much ill-feeling in the past between educational authorities and parents, it is clear that in the recommendations of this work committee an educationally justifiable point of view regarding this matter will have to be considered.

The other nine principles do not, to the same extent as the previous two, have particular implications for the education of the child with special educational needs. It will suffice to say that Principle 4, which stipulates that the provision of education should be directed at the needs of the individual in an educationally justifiable manner, inter alia, finds practical implementation in the existence and activities of the work committee for the education of children with special educational needs and that Principle 9 (reconciliation of the processes of centralization and decentralization) will possibly justify particular elucidation in the scope of this work committee.

1.4 THE CONSTRUCTION OF THIS REPORT

This report does not simply form a summary of the different subreports. The data, findings and recommendations contained in the basic reports, are rearranged and integrated in a distinct manner, overlapping is eliminated as far as possible and conflicting recommendations or contradictions are reconciled where possible. This report, which is the final report of the WCECSEN, also contains the final findings and recommendations.

After this introductory and orientation chapter, a comprehensive picture is sketched in Chapter 2 of the existing provision of education for handicapped, scholastically impaired and highly gifted children as set out in all the

basic reports. This information will be mainly statistical.

In Chapter 3 the two main constituents of a system for the education of children with special educational needs are sketched. These constituents are the categories of children and the range of the children for whom provision will have to be made, as well as their particular and diverse needs (the environmentally deprived, scholastically impaired, handicapped and highly gifted children); and the educators (teachers and other professional staff).

In Chapter 4 the various lines of inquiry and thought will be integrated into proposals for a system for the RSA to make provision for children with special educational needs in the RSA.

In Chapter 5 the integrated standpoint and recommendations of this work committee are presented.

CHAPTER 2

PRESENT PROVISION OF EDUCATION FOR CHILDREN WITH SPECIAL EDUCATIONAL NEEDS IN THE RSA

2.1 INTRODUCTION

At present provision of education for children with special educational needs in the RSA is controlled by and is the responsibility of several education authorities. Besides the four provincial education departments and the Department of National Education, which make provision for some of the specific needs of White pupils with special educational needs, there are three additional education authorities which see to the needs of the Coloureds and Indians namely the Department of Internal Affairs (for Coloured and Indian Affairs respectively) and the Department of Education and Training, for Blacks. In addition there are a large number of government departments (the provincial health authorities and the Department of Health, for example) and private bodies and organizations that play a role and have a statutory say in this matter.

The result of this divided control is that matters such as planning and policy-making differ, which means that programmes for identification and rendering assistance to children with special educational needs are approached in different ways. Co-ordination does exist but even between the provincial authorities there are still differences when it comes to defining the criteria for recognition and identification procedures for children with special educational needs.

The lack of a proper co-ordination programme seems to be the most conspicuous out of the different designations given to persons who within the different education departments fulfil basically the same professional function.

In this chapter the three categories of children covered in this investigation, namely scholastically impaired pupils (in mainstream education), handicapped pupils (in special education) and highly gifted pupils, will be discussed on the basis of the provision of education that is made for them in the RSA at present. Special attention will be paid to the following: incidence, identification, rendering of assistance, training, recruitment and selection of teaching staff, and the nature and numbers of other professional personnel concerned.

2.2 PROVISION OF EDUCATION FOR SCHOLASTICALLY IMPAIRED CHILDREN IN THE RSA

(Sonnekus, 1981; Van Niekerk, et al., 1981; Zaaïman, 1981)

2.2.1 The incidence of scholastically impaired children in the RSA

2.2.1.1 Implications of the Murray report for data on incidence

Data on the incidence of scholastically impaired children are dependent upon the criteria applied in the particular circumstances with a view to identification (recognition), and it is to be expected therefore that because of differences in policy in respect of the particular education authorities, provision of education and the numbers of pupils identified as children with special educational needs will differ from one education authority to the next. One should bear in mind that when it comes to rendering assistance to scholastically impaired pupils, the provincial education departments mainly follow the guidelines laid down by the Report of the Committee of Enquiry into the Education of Children with Minimal Brain Dysfunction (generally known as the Murray Report). According to this report pupils with minimal brain dysfunction (a matter that has in the course of time been more widely interpreted as all scholastically impaired pupils) are divided into three groups, the so-called Group A, Group B and Group C pupils.

Group A pupils are assisted in the classroom, Group B in separate schools or classes (thus outside the class context, but within the provincial education department concerned); while Group C pupils are referred to the Department of National Education for specialized assistance. Without going into the details of these three categories of pupils it is necessary to point out the following:

- . All the provincial education departments do not use exactly the same criteria in identifying Group A, B and C pupils;
- . provision of assistance for Group B pupils is not always approached in the same way, and
- . the education authorities for Coloureds, Indians and Blacks do not follow the above-mentioned practices in assisting scholastically impaired pupils because amongst other things the relationship that exists between the provincial education departments and the Department of National Education does not exist between these education departments and the latter department. Data on the incidence of scholastically impaired children are, in the case of the provincial education departments, reduced every time to the three groups of pupils mentioned above.

2.2.1.2 The incidence of White scholastically impaired pupils

a. The Department of Education Cape of Good Hope

Data provided by the Department of Education Cape of Good Hope indicate that in 1980 about 0,70 % of the total primary and secondary school population received remedial assistance from trained remedial teachers on a separate session basis. In this province children with learning problems are not accommodated in separate classes or schools.

Although children also receive remedial assistance from the class teacher in collaboration with the school psychological services within the class context, data are not available on the extent of this assistance. It is assumed that because of the class teacher's continuous and close contact with pupils he/she is in a favourable position to recognize children with learning problems in good time.

b. The Education Department of the Orange Free State

In this Department no remedial assistance is provided within the class context, in other words pupils receive assistance from full-time remedial teachers in groups (Group A pupils) and in separate classes (Group B pupils).

Group A pupils are assisted by means of individual remedial tuition (sometimes in groups of two or three) on a period basis. In 1980 2,56 % of the total school population was assisted in this way.

Group B pupils receive intensive remedial education in separate classes. Six classes of this kind have been introduced, and from 1 November 1979 to 31 October 1980 0,07 % of the total primary school population received remedial assistance.

c. The Natal Education Department

In 1980 3,4 % of the total school population received remedial education from full-time remedial teaching staff after the children had been identified by the class teachers. Of this number 92 % was initially classified as Group A pupils and assisted on a part-time basis (two or three half-hour sessions a week). These data do not include pupils who receive remedial assistance from the class teacher within the class context since statistics of this kind are not kept. The following are details of the progress made by pupils in remedial education.

PROGRESS	N	%
* Scholastically rehabilitated	904 pupils	26,5
* Left present school	378 pupils	11,0
* Poor co-operation	90 pupils	2,6
* Minimal improvement	229 pupils	6,7
* Referred to special education	81 pupils	2,4
* Transferred to remedial education	72 pupils	2,1
* Children who received continued remedial assistance	1 652 pupils	48,5
TOTAL	3 406 pupils	100,0

Of the above 3,4 % of pupils who were noticed by the remedial teachers, about 2,11 % were classified as Group B pupils and transferred to separate schools after they had received part-time remedial assistance for six months or longer. In addition there were a number of pupils who received no remedial tuition because of inadequate facilities and pupils whose problems were relatively serious. There are three schools in Natal that provide remedial education (Pietermaritzburg, Durban and Pinetown) with a total of 204 pupils (0,2 % of the total school population). A fourth school of this kind is envisaged for Northern Natal.

d. Transvaal Education Department

About 6,79 % of the total school population (primary and secondary) in the Transvaal receives one or other form of remedial assistance and the classification into three groups (A, B and C) is applied.

Data on children who are assisted within the class context (Group A) are based on estimates since these children are not reported and reliable statistics are therefore not available. The following estimates are made:

Primary schools: about 7 % of 322 956 = 22 605 ⁷ ₅₂
 Secondary schools: about 3 % of 175 469 = 5 264

With regard to pupils who receive assistance outside the class context (in child guidance clinics, auxiliary classes, clinic schools and hospital schools, for example) the following statistics are given (for 1980), some of which are also

based on estimates:

Assistance outside the class context 5 120 pupils

(full-time remedial teachers, 250 teachers who provide extra-mural remedial treatment, assistance provided by educationists (orthodidactics) and assistance by grade class teachers)

Auxiliary classes (for details on 1 250 pupils

auxiliary classes see subsequent paragraph on provision of assistance in the Transvaal Education Department)

Hospital schools (pupils in these 212 pupils
schools are all regarded as scholastically impaired)

Clinic schools 289 pupils

TOTAL 6 871 pupils

1,376.

2.2.1.3 Department of Internal Affairs (Indian Affairs)

In 1980 there were approximately 1 670 pupils (0,77 % of the total school population) who received remedial assistance in the course of remedial sessions outside the class context. There are no separate classes or schools for Indian children who are scholastically impaired. Nor is separate provision made for Groups A, B and C pupils. A system of clinic schools is being planned however.

Data on the numbers of children who are assisted by the class teacher within class context are not available.

2.2.1.4 Department of Internal Affairs (Coloured Affairs)

Remedial education in this Department is still in an early stage of development. The assistance that is in fact provided is in the form of two closely related branches, namely:

- (a) classes for remedial tuition given at primary schools on a session basis, and
- (b) remedial education sessions presented at school clinics with a view

to finer diagnosis and more specialized treatment of problem cases.

In this way about 250 pupils can be helped during a specific period of time. Further statistics in respect of incidence are not available.

2.2.1.5 Department of Education and Training

Data on the numbers of pupils who receive remedial assistance are not available. For a number of reasons (inter alia the large classes, i.e. high pupil-teacher ratios) one can assume that a large percentage of pupils in every class can probably be labelled as scholastically impaired. The figure of 50 % of scholastically impaired pupils is sometimes given, but this is not at all reliable.

2.2.2 Conclusion

Two tables providing a summary of the details of the incidence of learning impairments among pupils in mainstream education are set out below. Table 2.1 surveys the situation in the four provincial education departments and the Department of Internal Affairs (Coloured and Indian Affairs) and Table 2.2 the expansion in Black Education during 1978 and 1979 and therefore also the remedial assistance that will have to be provided.

Enquiries at all the education departments showed that it is not possible to establish the exact number of children requiring remedial assistance. In general the education departments accept the estimates of the Murray Report (1969) which states that 15 % of the school population to a greater or lesser extent requires assistance. In the case of serious environmentally deprived children the percentage will probably be much higher.

2.2.2 The recognition/identification of scholastically impaired pupils in the RSA

2.2.2.1 General remarks

Early recognition of the scholastically impaired child is of cardinal importance. In the case of all the education departments the teacher plays a fundamental role, because he/she is the person who is in daily contact with the child and can observe the first manifestation of symptoms of scholastic impairments. Children who make themselves conspicuous by for example laziness, unwillingness to co-operate, poor discipline and manifest behaviour problems and more serious

TABLE 2.1 SURVEY OF PROVISION OF EDUCATION FOR IMPAIRED CHILDREN IN THE FOUR PROVINCIAL EDUCATION DEPARTMENTS (WHITES) AND IN THE SCHOOLS OF THE DEPARTMENT OF INTERNAL AFFAIRS (INDIAN AND COLOURED AFFAIRS)

Education Department	Cape	Natal	OFS	Transvaal	Indian Affairs	Coloured Affairs
Total number of pupils: primary and secondary	231 262	101 879	74 000	498 926	217 598	
% of children assisted outside class context (individual sessions)	0,70	3,4	2,65	1,59	0,77	NO DATA AVAILABLE
% of children in separate remedial n.a classes/schools	n.a.	0,20	0,07	0,25	n.a.	
% of pupils referred to the DIE	c 0,04	c 1-2	0,09	0,019	n.a.	
% of children in separate classes/schools replaced in the ordinary class context	n.a.	c. 98	c.90	37,92	n.a.	

TABLE 2.2: INCREASE IN BLACK PRIMARY EDUCATION

	White area	1978 Black states	Total	White area	1979 Black states	Total	Percentage increase
Number of pupils	1 215 296	1 569 645	2 784 941	1 292 005	1 664 859	2 956 864	6,2
Number of teachers	24 159	28 756	52 915	26 731	30 643	57 374	8,4
Number of schools	6 061	3 846	9 907	6 271	3 929	10 200	3,0

Double sessions were used in 1 425 schools in the White area and 2 052 schools in the Black states in 1979, in contrast to 2 402 schools in the White area and 2 154 schools in the Black states in 1978

In the White area there were 4 734 farm schools in 1979, in contrast to 4 556 in 1978, which represents an increase of 4 % in the number of farm schools.

The number of private schools increased from 175 in 1978 to 179 in 1979.

learning problems, that is the behaviourally deviant and the poor achiever, are recognized promptly by the teacher as children whose scholastic progress is unsatisfactory.

Most of the education authorities however also make provision for specialized auxiliary services to assist the teacher in identifying and assisting the scholastically impaired child. In this regard the school psychological and guidance services have been introduced which include the services of school psychologists (all departments), the orthopedagogue (TED), the educationist (orthodidactics) (TED), the sociopedagogue (TED), the vocational leader (TED) and the remedial teacher (several education departments).

2.2.2.2 The practice of identification and diagnosis in White education

a. The Department of Education Cape of Good Hope

In this Department pupils who are identified by teachers are referred by the school principal to the Psychological Services. The school psychologists or school clinicians conduct a diagnostic examination at the school to determine the cause of the learning impairment. The purpose of this examination is to determine the child's visual-motor, acoustic-motor, intellectual and physical level of development, his personality structure as well as his reading and spelling achievements. In addition, use is made of all available data that the school can supply in respect of the child's intellectual ability, scholastic level of achievement (based on an error analysis), socio-economic circumstances and development history: The co-operation of the parents is counted on.

Specific tests used in the diagnostic examination include the following. The New South African Individual Scale, Bender Gestalt, Beery, Frostig, one Minute Reading Test and the Incomplete Sentence Test.

Where necessary the child is also examined by staff of the medical services.

b. The Natal Education Department

In this Department considerable emphasis is placed on the early recognition and diagnosis of the scholastically impaired child and for this reason group screening procedures are applied at pre-primary and Sub A level. For this purpose the Group Test for 5/6 year-olds, the Aptitude Test for School Beginners and the Department's Reading Readiness Programme and the attendant checklist are used.

If the teacher decides or suspects that a child has a learning or behaviour problem he/she is referred to the nearest clinic.

The main criterion used in referring a scholastically impaired pupil however, is when he/she has failed twice.

Mention should be made of the fact that numerous pupils are referred to the school Psychological Services by the parents themselves and a considerable number by other bodies and organizations, without these persons first having liaised with the school. The extent to which different persons and organizations are involved in referring pupils is as follows:

- . Percentage of pupils referred by schools - 65
- . Percentage of pupils referred by parents - 23
- . Percentage of pupils referred by other bodies and organizations, for example doctors, etc. - 12

With regard to learning problems* in particular the diagnostic examinations are carried out by the remedial teachers who concentrate primarily on an analysis of the learning problems/underachievement. The diagnostic examination of the child's personality structure and behaviour deviations is conducted by the school psychologist. Where necessary supplementary examinations are also conducted by the medical and paramedical staff.

The classification of scholastically impaired pupils also takes place in terms of Groups A, B and C and the ratio is more or less as follows:

- . 92 % are initially classified as Group A pupils;
- . 7 % are classified as Group B pupils, after they have usually already been assisted on a part-time basis by remedial teachers in the ordinary classes, and
- . 1 % are classified as Group C pupils after they have received remedial education at a remedial school for at least two years without any actual permanent improvement.

These pupils are referred to the Department of National Education for further diagnosis and treatment.

* The concept "learning problems" is used here and elsewhere in the chapter in the sense of learning impairment.

In addition to identification by the subject teacher, further diagnosis of the scholastically impaired pupil is primarily the task of the guidance teacher at secondary school. In this regard he/she makes use in particular, of the following tests: The New South African Group Test, the Junior and Senior Aptitude Tests, the JSPB¹⁾ and the SPB²⁾, the 19 Field Interest Inventory, scholastic diagnostic tests and the Survey of Study Habits and Attitudes (SSHA).

It is obvious that the guidance teacher's diagnosis is not really directed towards the scholastically impaired pupil. Serious cases are referred to the Psychological Services with a view to:

- . placement in special education
- . placement in a hostel
- . exemption from compulsory schooling
- . possible placement in a Children's Act school
- . analysis of emotional problems
- . further treatment of children with behaviour deviations.

c. The Education Department of the Orange Free State

The general policy is to subject Sub A pupils to a screening test during their first six weeks of school. Here the NB Group Tests for 5/6-year-olds is used, the primary objective being to obtain an indication of the pupil's intellectual potential. In some schools all pupils in Sub B and Std 1 are also tested by means of the HSRC's Diagnostic Tests in Language and Arithmetic. Those pupils who obtain a score of less than 3 in one of the subtests are referred to the clinic of the Psychological Services for further examination.

If pupils are identified by the teacher as children with learning problems the school principal refers them to the Psychological Services. It is mainly those children who fail who are regarded by many school principals as scholastically impaired, in addition to those pupils who are suspected of having a possible psychoneurological impairment.

In many cases it also depends to a large extent on the individual teacher's intuition when it comes to suspecting scholastic impairment. Besides, the emphasis is mainly on learning problems when one refers to scholastic impairment.

1) Junior Scholastic Proficiency Battery (1976), HSRC test

2) Scholastic Proficiency Battery (1969), HSRC test

Children who manifest other problems are referred to the school psychologist for the necessary attention.

The general evaluation by the Psychological Services includes inter alia

- . the pupil's general progress in the past as noted on the Ed. Lab. Card;
- . the pupil's IQ according to group test after Std 3;
- . a scholastic questionnaire completed by the teacher in respect of the pupil's classroom activities, general scholastic achievement, etc., as an integral part of the so-called comprehensive examination conducted by the school psychologist.

There are schools where no children and others where only a few children with problems are referred to the Psychological Services. In addition, it would appear that most schools refer mainly those pupils with the most persistent learning problems, with the result that the largest numbers of pupils examined are from the senior primary classes.

There are also schools, however, where special attention is paid to pupils who underachieve. In fact, there is one specific school that actually tries to trace pupils of this kind. After Std 3, when all the pupils' IQ's are known, each pupil's expected level of achievement is determined by means of the following formula:

$$\frac{\text{IQ of the child}}{\text{Average IQ of the class}} \times \text{the average level of achievement of the class}$$

When the child does not reach his expected level of achievement, the matter is studied closely and where necessary the aid of the Psychological Services enlisted.

Besides concentrating on the perceptual conditions for learning and an analysis of the learning problems in respect of reading, spelling and arithmetic, in his diagnosis the clinical-remedial teacher mainly uses the HSRC's diagnostic tests.

It is also clear that generally speaking scholastically impaired pupils are qualified on the basis of criteria that apply to the psychoneurologically learning impaired child.

In addition to going into the history (anamnesis), of the child, in particular use is made in diagnosis of the following tests: Bender Gestalt, Wepman, Beery and Benton.

It is interesting to note that in diagnosis, the emphasis is only partly on problems in education which may lead to scholastic impairment. It would seem that scholastic achievement in general is the main consideration in determining scholastic impairment.

Whereas the school principal takes an active interest in the scholastically impaired pupil, the remedial teacher on the staff is consulted persistently in an effort to understand the pupil better.

d. The Transvaal Education Department

Because of the importance of early identification of scholastic impairment, this is continually emphasized by the Education Department, especially from the orthodidactic standpoint.

The Education Department recognises the principle that "the pupil with a learning problem identifies himself. For this reason every teacher is expected to refer to the specialist in didactics those children who, after the completion of the school readiness programme and before formal education, start experiencing serious problems.

Identification of the scholastically impaired child therefore starts with the class teacher who endeavours to pick out those pupils who outwardly do not appear to be learning, progressing and achieving according to expectation.

Although the emphasis is mainly on scholastic achievement as such, numerous school principals also make a point of asking teachers to look out for emotional problems, visual, auditory, speech and other impairments as well as possible problems in the formative education of the child. If the problem cannot be sorted out by the class teacher and subsequently in conjunction with the head of department of educational guidance and the school principal, the pupil is referred to the local clinic of the School Psychological and Guidance Services.

In addition the speech therapist carries out a screening test of all Grade 1's in order to recognize pupils with language problems.

Pupils experiencing serious learning problems are immediately referred to the remedial educationist (orthodidactics) who conducts a diagnostic examination of the child at the school.

In principle an orthopedagogic approach is advocated because it takes into consideration a variety of factors which in their mutual relations can lead to scholastic impairment in general and the learning problem in particular, although a great deal of emphasis is still placed on the learning problem as the result of a psychoneurological impairment.

Since the Department advocates that the scholastically impaired child should be understood as a total person his learning problem is not regarded as the only problem.

For this reason a comprehensive orthodidactic examination is carried out. The child's world of learning and experience is therefore also studied. Attention is also paid to the child's physical disposition, his perceptual development, his scholastic position with regard to reading and spelling in the mother tongue and Mathematics, his intellectual potential, his domestic circumstances and his emotional life. An effort is made to gauge what, for some or other reason, has gone wrong in the child's learning.

In brief, diagnosis embraces the following:

- . An interview with the child's parents by the remedial educationist (orthodidactics) to construct a comprehensive picture of the child's prehistory;
- . an interview with the class teacher during which a questionnaire that has been compiled beforehand is filled in, and
- . a complete orthodidactical investigation to analyze the specific learning problems in conjunction with the total personal image of the child.

In addition, an audiometric examination is carried out by the speech therapist as well as a medical examination, if this is deemed necessary.

If necessary the child is referred to other professional personnel, even to outside parties such as neurologists, etc.

The pupil is classified as a Group A, B or C pupil on the basis of the findings of the orthodidactical examination. In practice, Group C pupils seem to be those who, after two years of remedial education in the auxiliary class, are still unable to return to the ordinary class.

Group A pupils seldom manifest significant indications of psychoneurological impairment, whereas this aspect still applies to a large extent in the identification of the Group B pupil if one bears in mind the main factors taken into consideration.

Psychoneurological impairment: Where an impairment of this kind is confirmed by a medical diagnosis, the pupil is classified as Group B. In practice, a child who is found to be medically "normal" but whose scholastic progress is unsatisfactory in spite of average intelligence, is also classified as Group B on the recommendation of the educationist (orthodidactics).

Environmental deprivation

Domestic problems: In such cases the child is discussed by the complete panel attached to the clinic and where necessary examined by other professional personnel.

With regard to identification and diagnosis, special emphasis is placed on an understanding of the scholastically impaired child's total upbringing and situation in life. Whether or not this actually succeeds is a moot point. Many auxiliary class teachers report that they would very much like to be assisted by the orthopedagogues and sociopedagogues but never see those people because of their overloaded programmes.

Many school principals are of the opinion that since the use of Group IQ tests has been stopped, it is difficult to establish with a reasonable degree of certainty whether a child does in fact underachieve.

2.2.2.3 Department of Internal Affairs (Indian Affairs)

Recognition of the scholastically impaired pupil is in the first instance the task of the class teacher. There are however no prescribed criteria for this and in practice the general norm is applied that if a pupil has failed twice he is regarded as scholastically impaired. These pupils are then subjected to

further examination by a remedial teacher who is usually on the staff of most schools. The examination includes for the most part a didactic diagnosis with special reference to reading, spelling and comprehension. For this purpose self-designed diagnostic tests are used as well as an additional number of internationally accepted tests such as that of Schonell, and others.

The pupils are also referred to the Psychological Services for a clinical examination and those who are classified as scholastically impaired children are placed in a remedial (adaptation) class. At present there are 109 adaptation classes with a total of 1 500 pupils.

In secondary school it is the guidance teacher who pays attention to the scholastically impaired pupil, in particular those pupils doing the practical course.

The criterion used in the placement of pupils in the practical course is poor scholastic achievement.

At present there is a large percentage of pupils in the practical course as shown by the following figures:

Std 6	:	3 416 (19 %)
Std 7	:	4 927 (20 %)
Std 8	:	5 302 (35 %)
Std 9	:	2 423 (23 %)
Std 10	:	1 861 (25 %)
Total	:	17 929 (27 %)

The fact that such a large percentage of pupils are in the practical course suggests unequivocally that a considerable number of pupils are "kept" out of the ordinary class because of a scholastic impairment which apparently did not receive or has been receiving the necessary specialized attention during their school careers.

At present an effort is being made to lay down more differentiated criteria in selecting pupils for the practical course. A pupils' achievement in English and Mathematics in the ordinary school examinations, his achievement in English and Mathematics in departmental achievement tests, his intellectual potential and the teacher's general evaluation will be taken into consideration here.

2.2.2.4 The Department of Internal Affairs (Coloured Affairs)

In general, recognition of the scholastically impaired pupil in Coloured education is regarded as a luxury to which little attention is paid. The main problem area here is widespread environmental deprivation. The policy is to introduce adaptation classes for mentally handicapped pupils and remedial classes for scholastically impaired pupils. A remedial class cannot be established at a school unless there is an adaptation class to prevent mentally handicapped pupils being placed in a remedial class.

Pupils from Sub A to Std 5, but particularly from Sub A to Std 2 are included in the remedial educational programme. To identify pupils for remedial education the class teachers are consulted first. The pupils' achievements in reading, spelling and Mathematics are compared with the average marks of the class. Where possible score schedules are taken as the point of departure.

Pupils identified in this way are subjected to further testing to determine whether they should be placed in adaptation or remedial classes. The following tests are included:

- (a) The old NB Individual Scale (Fick Scale) or the New South African Individual Scale.
- (b) Standardized individual scholastic tests such as graded and speed reading tests, spelling tests as well as diagnostic Mathematics tests, which are often simply compiled by the tester himself.

So for example the average primary school with 1 000 pupils has eight adaptation classes in which mainly language enrichment programmes are provided rather than proper remedial education.

The problem of recognition of scholastic impairment is further complicated by the fact that the average teacher is not in a position to recognize scholastically impaired pupils because of inadequate training, especially in the light of the fact that most of them have only two years' training after Std 8. At present efforts are being made, by the clinics in particular by means of circulars and discussions, to create greater sensitivity among teachers when it comes to identifying the scholastically impaired child.

2.2.2.5 The Department of Education and Training

In the schools of this Department there is also a lack of systematic and planned

action to identify scholastically impaired pupils. In actual fact pupils who do not do well are simply not promoted to the next standard. If there is a possibility of underachievement this is not taken into consideration for there is simply no reliable method of gauging a pupil's intellectual potential. In addition, none or very few standardized scholastic tests are available.

Owing to inadequate professional grounding and training, most teachers are either insensitive to or not in a position to identify scholastic impairments.

It is asserted that large numbers of pupils, especially those in the starting classes, lack experience in the prescribed subjects, particularly those children from the country.

Since 1973 "special classes" have been introduced at schools. All Sub A pupils who have failed as well as all pupils in the higher standards who have failed twice are transferred to these classes.

The Sub A pupils in the special classes first go through the school readiness programme again, little attention being paid to remedial education.

Those pupils who show reasonable progress in the special class are transferred back to the ordinary class.

2.2.2.6 Summary of the present practice of identification

It is clear from the above that a significant percentage of pupils can be qualified as scholastically impaired. Although these pupils receive a certain amount of special attention in some departments, in many cases there are serious shortcomings in the purposeful and effective practice of identification. Many pupils (particularly Blacks) are not identified and do not receive the attention they require.

The teachers themselves for the most part pay accidental and sporadic attention to the scholastically impaired child, most of them either lacking the time, willingness or qualifications to do so. The conviction among teachers that the child with problems is not the responsibility of the teacher goes deeper than is generally believed. The underlying reasons merit further study.

At schools where the principal places a high premium on the recognition and assistance of scholastically impaired pupils, a more purposeful approach to identification seems to be applied.

When it comes to the teacher deciding whether or not a pupil does have a scholastic impairment, there is a great deal of uncertainty and the teacher's judgement is regarded as the main criterion. In certain departments the IQ figures are not available and there is virtually no reliable indication of what can actually be expected of a pupil.

For the average teacher and school principal the scholastically impaired pupil is simply the poor achiever and the failure. Many regard test and examination results mainly as criteria for promotion and not as criteria for diagnosis or screening. It is seldom assumed that the fault could be with the teacher. There are schools however where a pupil's marks for the previous year are used as a screening aid.

General screening of school beginners is still extremely limited in certain departments.

The criteria for identifying the scholastically impaired child are generally somewhat vague. In most departments there are clear instructions for recognizing scholastically impaired pupils, i.e. Group B and C pupils in so far as this has a bearing on rough and fine motor ability, psychic dispositions such as attention span, daydreaming, rate of work, tearfulness, etc. These demarcated criteria often do a disservice to the scholastically impaired child who does not make himself conspicuous on the basis of these criteria. In practice two groups of scholastically impaired pupils are concentrated on, namely those who make themselves conspicuous by means of behaviour deviations and those with a possible psychoneurological impairment. It is also difficult for the teacher to distinguish in the class between moderate mental retardation, emotional disturbance and psychoneurological impairment owing to the complexity of scholastic impairment.

In practice the psychoneurological impairment is also overemphasized as though it were the only cause of scholastic impairment. Since the publication of the Murray Report, the concept of minimal brain dysfunction (MBD) has also become widely known in teaching circles.

The effect of the medical approach to the diagnosis and treatment of the scholastically impaired child has not always been favourable.

There are in point of fact many teachers who are only too willing to assume that every scholastically impaired pupil necessarily has to contend with one or other neurological or mental deficiency. This narrow view has contributed to scholastically impaired pupils, among whom there is no vestige of deficiencies of this kind, to a large extent being forced out of the visual field of education. Many school psychologists and educationists (orthodidactics) have also expressed the conviction that among the vast majority of pupils with specific learning impairments there is in any event no question of any neurological stress.

Research on scientific diagnosis of the scholastically impaired pupil also primarily embraces a directedness towards the psychoneurological scholastically impaired child. Madden states the following: "Much of the literature consists of discussion and argument. Controversies have developed over diagnosis, terminology, diagnostic tools, test reliability and validity, etc. However, up until the present day, the diagnosis of minimal brain dysfunction has to a large extent been based on a complex programme criterion and on an imperfect predictor variable, that being an IQ score."

Intercultural influences in respect of scholastic impairment have as yet not been studied a great deal by researchers and this is undoubtedly a matter that merits closer attention.

In secondary school there is still more emphasis on subject achievement than in primary school and the average teacher is more attuned to identifying learning deficiencies in respect of the subject-matter rather than the scholastically impaired pupil as such.

Guidance teachers provide a valuable service at schools but their work is not really geared to identifying and assisting the scholastically impaired pupil.

One gets the impression that the education authorities are able to "get rid of" a considerable number of scholastically impaired pupils by unobtrusively channelling them from the ordinary course to the practical

course. In fact educationists (orthodidactics), orthopedagogues and career counsellors also report that about 90 % of the pupils are placed in the practical course without the Psychological Services having been consulted in this matter. The child's achievement is regarded virtually as the only guideline and the main criterion for placement is the fact that a particular child has not satisfied the requirements for passing a specific standard regardless of the underlying reasons. In many cases placement in the practical course is also the only "therapy" provided. Many school principals also concede that these pupils do not receive remedial treatment despite the fact that many of them have a good intellectual ability.

Obviously the staff of the Psychological Services can attend to only some of the pupils who report to them during the course of the year. There is a considerable percentage who do not undergo any further diagnostic examinations whatsoever on the one hand, and a fair percentage who are in fact examined but do not receive any remedial treatment on the other hand. It is clear that the scales for provision of personnel in respect of the Psychological Services are completely inadequate. The impression given is that a large percentage of scholastically impaired pupils are not identified at all because of a lack of suitably qualified staff at schools. In addition, a considerable number of pupils are placed on waiting lists because of a lack of facilities and specialized personnel, which means that diagnosis is delayed because the available personnel simply cannot handle these pupils.

Many secondary school principals maintain in particular that the Psychological Services pay little attention to the scholastically impaired child because of a shortage of staff and for this reason they do not even bother to refer such pupils to this body.

Owing to the shortage of personnel at the Psychological Services and the fact that many schools do not have remedial teachers on their staff, in many cases only potential Group B and C pupils are classified and placed in a remedial class or school, in other words only those pupils who manifest obvious symptoms of psychoneurological impairment, and when there is a large gap between IQ and achievement. In addition, in many cases attention is paid only to those pupils who manifest learning problems as such. Children with other personal problems such as emotional disturbance

and less serious behaviour deviations are not referred to the Psychological Services but to the school psychologist who does not pay any attention whatsoever to the possible connection between the problem identified and the act of learning, because in the first place this is not identified as a learning problem.

There are also indications that there is a definite connection between the number of specialized auxiliary personnel and facilities available (for example remedial teachers, auxiliary classes, clinic staff, etc.) and effective recognition of scholastically impaired pupils. One noticeable feature, for example, is that schools that have auxiliary classes also identify relatively more children as possible scholastically impaired pupils than those schools without remedial classes of this kind.

The most significant shortcoming with regard to the present practice of identification appears to be ignorance among professional teachers in respect of the orthopedagogic component of scholastic impairment.

In the junior primary stage of school in particular a fairly intensive effort is made to identify the scholastically impaired child as someone with specific learning impairments in respect of reading, spelling, arithmetic and writing, whereas the impaired pupil is to a large extent ignored in the senior primary phase and at secondary school.

2.2.3 The practice of rendering assistance to the scholastically impaired pupil

2.2.3.1 Introduction

In general the teacher is expected in practice to render specific assistance (in the context of the class in mainstream education) to the pupil who has a scholastic problem, be it over the broad spectrum of his learning activities or a specific section of the subject-matter. In addition a child who makes himself conspicuous because of a sustained need for special auxiliary tuition after he has been examined by a school psychologist (educationist (orthodidactics); remedial specialist), is dependent upon specialized assistance, either on a part-time basis as a Group-A pupil or for a certain period on a full-time intensive basis as a Group B pupil. In none of these cases can the matter be dealt with in a random fashion or according to any kind of stereotype method if the impairment is to be properly treated. The point of departure for all provision of assistance implies by its very nature the need for

an integrated practice in which the same principles and criteria should in equal measure underly the process of identification, diagnosis and provision of assistance.

In all the education departments, involvement with the scholastically impaired child invariably follows more or less the same course: identification of a "learning problem", the class teacher's initial efforts to assist the child; the teacher reports to the principal or the head of department; the child is referred to the school Psychological or Guidance Services; evaluation and recommendations in respect of a strategy for providing assistance, and finally the implementation of the recommendations.

The following paragraphs contain a brief discussion of how assistance is provided for scholastically impaired pupils in each education department.

2.2.3.2 The role of the class teacher in the assistance programme

In all the education departments the class teacher is to a greater or lesser extent included in the remedial programme for scholastically impaired pupils. This involvement ranges from the one extreme where the teacher plays a role on his own initiative only (Coloured Education and the Natal Education Department) to the other where the class teacher is involved in a carefully planned way in the programme of the remedial teacher (Indian Education, Department of Education, Cape of Good Hope) of where he must assume all responsibility for providing remedial assistance for these pupils (TED). With regard to the latter education department, the educationist (orthodidactics) provides the class teacher with an auxiliary programme which is especially compiled for the particular child or he refers the teacher to comprehensive auxiliary programmes which are made available by the clinics to the schools in the province. The most predominant modus operandi seems to be where a specialist (remedial teacher, school psychologist, educationist in orthodidactics) and the class teacher collaborate in an endeavour to achieve the desired result.

2.2.3.3 The involvement of remedial teachers

There are considerable differences in approach among the education authorities in respect of the appointment and the nature of the involvement of remedial teachers in assisting scholastically impaired pupils. In this regard it can happen that the remedial teacher is attached to the particular school (Indian Education, Natal Education Department and Coloured Education) or that he is attached to a clinic and operates at the school (OFS Education Department,

Department of Education Cape of Good Hope or that no remedial teachers are involved in the programme (Transvaal Education Department, Department of Education and Training) and that other personnel such as the class teacher carry out this function.

A variety of methods are followed, which include inter alia, special remedial classes (Indian Education), a combination of remedial education with the adaptation class (Coloured Education), individual assistance in the afternoons at clinics and the withdrawal of pupils (individually or in groups) from the classroom when the basic subjects are not being presented. In addition, the Department of Education Cape of Good Hope also makes provision for travelling remedial teachers who withdraw pupils from the classes for the purpose of remedial tuition. In the latter case provision of assistance is usually aimed at eliminating the learning problems surrounding reading, writing, spelling and Mathematics. The auxiliary programmes for pupils are sometimes compiled by the remedial teacher himself/herself (OFS) but for the most part in conjunction with other persons for example, who are attached to the clinics, such as the school psychologist.

The Department of Education and Training has started a programme of level tuition (Level Tuition Programme) in which provision is made for remedial education. An Individual Tuition Class (ITC) is envisaged for every school in which 6 to 8 % of the poorest achievers will receive tuition in Sub A. In this way provision will also be made for pupils who experience progress problems in Sub A. At present remedial assistance is still attended to by the principal and teachers with the guidance and assistance of the inspectorate. For Group A pupils more intensive measures are usually applied. The Education Department of the Orange Free State for example makes provision for intensive remedial education for six classes in provincial schools, while in the case of the Natal Education Department provision of assistance for these pupils is on a temporary full-time basis in addition to which direct remedial guidelines are required. In the Transvaal Education Department auxiliary classes have been introduced where children with specific learning impairments (Group B pupils) are taught by specially trained teachers on a full-time basis. A properly integrated programme is followed in respect of therapy and the relief of learning problems on the basis of individualization and following a totality approach. Attention is paid to preparing the child for learning over a broad spectrum which can also be to the advantage of a particular child who is not taken into the class because of a specific learning impairment. An endeavour is made to involve the parents intimately,

and in principle the services of the orthopedagogue are placed at the disposal of the auxiliary class teacher.

2.2.3.4 Remedial assistance by the school psychologist

The Department of Education and Training is the only education department that does not make use of the services of a school psychologist while in the case of the Transvaal Education Department, an educationist (orthodidactics) has more or less the same activities as the school psychologist. Generally speaking the school psychologist is not directly involved in assisting individual pupils but rather in assisting the remedial teacher by devising assistance strategies and programmes, evaluating pupils and training staff (teachers) on how to render assistance. In the Natal Education Department the school psychologist is involved in the placement of pupils with behaviour or family problems in other courses and he also evaluates these pupils with due consideration for their possible need for remedial education. The educationist (orthodidactics) in service of the Transvaal Education Department monitors the work in the auxiliary classes in his area and is involved in compiling or demarcating detailed auxiliary programmes for the class teacher in respect of the children whom he has evaluated. In the Department of Education Cape of Good Hope the school psychologist and the teacher psychologist are concerned with remedial education at primary and secondary level of education respectively.

2.2.3.5 Other personnel concerned with remedial assistance

In this regard reference can be made to the part played by the guidance teacher at the secondary schools of the Department of Indian Education and that of the speech therapists in remedial education in the education departments of the Cape, Orange Free State and Transvaal. In the case of the Transvaal Education Department, there are two posts for speech therapists at each clinic and the educationist (orthodidactics) can approach them with a view to language enrichment programmes and auditory training. The Department also has a limited number of posts for occupational therapists who work mainly in the auxiliary classes.

2.2.3.6 Evaluation of the present practice of provision of assistance

The shortage of properly qualified staff, a lack of skill and unfounded methods of approach are also often prominent in provision of assistance for scholastically impaired pupils.

The class teacher because of his/her full programme is not in a position to assist the scholastically impaired pupil on an individual basis. Opportunities for effective liaison with the educationist (orthodidactics) or school psychologist are also few and far between because of the nature of the timetable. The following can be put forward as the most important shortcomings that compel the class teacher to pay too little attention to assisting the scholastically impaired child:

- . Inadequate training with regard to identifying, evaluating and assisting these children
- . Too little knowledge in respect of the whole question of preparing a child for learning
- . Individualization in everyday teaching suffers because of overcrowded classes and overloaded syllabuses
- . Achievement is regarded too much in terms of a criterion for promotion and not a criterion for evaluation
- . Too little attention is paid to the prevention of learning problems, especially in respect of learning problems that arise at an early stage (also pre-school).

The need for sufficient posts for remedial teachers at all primary schools merits serious attention. The allocation for example of one teacher for every 300 or 400 children as in the case of some provinces is inadequate. At schools where there is in fact a remedial teacher, pupils sometimes have to wait up to a year after they have been evaluated for remedial tuition to start.

Too little attention is paid to the components of preparing a child for learning in a remedial and therapeutic programme. Remedial education concentrates too much on the perceptual substructure of the learning process. Function exercises are consequently too dominant without the learning process as a whole being taken into consideration.

The greatest need in respect of Group B pupils is better provision of education. According to school principals, in the majority of TED schools that already have auxiliary classes, a second class could easily be filled. The ideal situation would be to have a junior and senior auxiliary class where tuition could take place more effectively. A possible explanation for the apparent insatiable need for auxiliary classes in the province could be the fact that there are no full-time remedial teaching staff at schools. Moreover, one cannot deny that six intensive remedial classes are inadequate to serve the Orange Free State,

despite the fact that there are full-time remedial teachers. In the other two provinces the situation is the same.

In the case of Coloured and Black education the introduction of more full-time auxiliary classes (remedial classes) also merits serious attention.

In no other sphere is the need for a uniform policy and co-ordination in respect of provision of assistance more urgent. A uniform system in terms of auxiliary classes and remedial teachers is proposed throughout.

The main problem in respect of the post of school psychologist (educationist) (orthodidactics)(TED) is the shortage of staff. Owing to considerable overloading in respect of schools referring pupils for diagnosis, it is impossible for the school psychologist to devote the necessary attention to compiling auxiliary programmes, consulting the remedial teacher and class teacher, etc.

A proper interdisciplinary (transprofessional) method of operation is seldom found. A good example here is the integration of speech therapy where contact between the speech therapist and the remedial teacher is often too sporadic. Certain remedial teachers feel that there is a need for more occupational therapists. Fragmentary or one-sided treatment of the problem area of the particular child is a real danger.

In conclusion, the most important general shortcoming in remedial education is in the first instance the aims as summarized in the contents: a strong practice is followed virtually throughout in respect of the elimination of the symptoms of learning problems by, regarding the accomplishment of learning, the practice of a one-sided form of perceptual functioning exercises as remediation. However, complete reconstruction of the learning world of the scholastically impaired child is seldom found, since a purposeful and planned scheme in respect of the extent of the child's problem is usually ignored.

2.2.4 Training of personnel for the scholastically impaired child

2.2.4.1 The teacher

Owing to his favourable position in being actively involved with the pupil and his knowledge of the situation in formative education, the teacher is best equipped to pay special attention to the scholastically impaired pupil. If one bears in mind that it is the teacher's task to guide the child properly, he should therefore not neglect to pay special attention to the scholastically

impaired child.

And yet the fact remains that the teacher is unable to carry out this task properly, a task that involves both identification and provision of assistance. There are several reasons for this phenomenon, the main one being that the present-day teacher is overloaded and does not have enough time to account for each child individually. In addition, the average teacher is also not in a position to fulfil his didactical-remedial role in the classroom because of inadequate training, a lack of access to the available advanced measures for diagnosing and an inability to conduct qualitative error analysis. Several members of the psychological services of the various education departments confirm that numerous teachers do not even spot general and conspicuous symptoms of scholastic impairment.

A study of the syllabuses of a few training institutions has revealed that an effort is being made to equip teachers to ensure learning results among pupils. Already many aspirant teachers are realizing that every pupil will automatically do well if the teacher can just apply the right recipe during the course of the lesson. This conviction that the pupil can, must and will learn is firmly implanted in the student's future approach to the pupil with whom he will come into contact in the future. The result is that the aspirant teacher develops an extremely vague directedness towards the pupil who may experience problems notwithstanding the praiseworthy aims contained in the present differentiated policy of education and with which he is in fact familiarized.

According to the requirements for employment in education it is interesting to note that the requirement in respect of the capability of becoming involved with the scholastically impaired pupil is still not enforced.

With regard to the minimum requirements laid down in the "criteria for the evaluation of South African qualifications for employment in education" in respect of the large variety of diplomas and degrees for teacher training for both primary and secondary schools, specific provision is made throughout for the following:

Firstly, academic and subject didactical training for the required school subjects is stressed and secondly Pedagogics/Education is given due attention throughout. Through Psychopedagogics/Educational Psychology/Psychological Pedagogics/Empirical Education therefore, special provision is made for knowledge about the child in general and his personality development throughout the various stages.

Special emphasis is also placed on subject didactical training which is primarily geared to aspects covering form and contents which, during the classification of new contents or the acquisition of certain skills, etc. finds expression in the course of the lesson.

Besides the stipulation in all cases (with the exception of the four-year HED for junior and/or senior primary school) that school guidance should also be included in the courses, there is no specific regulation for or reference to the inclusion of Orthopedagogics, Orthodidactics or Remedial Education as individual subjects.

A study of the syllabuses and curricula of some of the training institutions has shown that the composition of courses follows the prescribed criteria for courses fairly closely and that very few of these institutions have tried to do anything to bridge this gap.

With regard to school guidance, attention is paid to the indications and recognition of learning problems amongst others. As far as training in respect of scholastic impairment is concerned, a study of the syllabuses and curricula of a few training institutions has revealed in general that reference is made to this only insofar as a few periods have to be devoted to learning problems in the subjects Psychopedagogics, Educational Psychology, Empirical Education or Didactics.

An analysis of that part of Psychopedagogics or another subject that has to be devoted to learning problems in comparison with other educational-psychological aspects and so forth is provided in Table 2.3

It is clear that for the most part limited attention is paid to the scholastically impaired pupil and then more specifically with particular reference to learning problems as such. Most curricula include the following aspects: (N.B.: If one considers the limited section of the subject devoted to the scholastically impaired pupil, it stands to reason that the variety of aspects referred to in the syllabus can only enjoy superficial attention.)

Individual differences and type of pupils

The handicapped pupil

The scholastically impaired pupil

The weak-normal pupil

The subnormal pupil

TABLE 2.3

THE NATURE OF THE TRAINING AND THE TIME ALLOCATED TO ASPECTS PERTAINING TO ORTHOPEDAGOGICS, ORTHODIDACTICS OR LEARNING PROBLEMS AT DIFFERENT TRAINING INSTITUTIONS

TRAINING INSTITUTION	COURSE	% OF THE TIME ALLOCATED TO ASPECTS PERTAINING TO ORTHOPEDAGOGICS, ORTHODIDACTICS OR LEARNING PROBLEMS	NATURE OF TRAINING
University of Durban-Westville	B. Paed. Prim. Ed.	+ 9 % in first year ± 15 % in fourth year	Principles of Remedial Education
University of Durban-Westville	Four-year degree B. Paed.	+ 9 % in first year ± 5 % in fourth year	Factors that benefit and harm learning
UNISA	Four-year HED	± 15 % in fourth year	Scholastically impaired, gifted, juvenile delinquent
University of Port Elizabeth	Four-year HED	± 5 % in second and fourth year	The child with learning and educational problems
University of Port Elizabeth	HED postgraduate	+ 5 %	Problematic educational situation of the secondary school child
University of Port Elizabeth	B. Prim. Ed.	+ 25 % in third year	Learning and educational problems among children
University of Stellenbosch	B. Prim. Ed.	+ 25 % of course education I and II specialization third and fourth year in learning education problems	Learning and educational problems in the primary school
University of Stellenbosch	HED postgraduate	Full semester course in Educational Psychology	-
University of the North	Four-year HED	+ 6 % in second year ± 15 % in third year	Remediation of learning problems The exceptional child and his education
University of the North	Three-year HSED	+ 20 % in third year	Behaviour problems, and the exceptional child and his education
University of the North	Three-year UED	+ 10 % in third year	The exceptional child and his education
University of Natal	HED postgraduate	+ 6 %	Learning problems and the influence of the school and home
University of the Western Cape	SED one-year diploma	?	"Adaptation techniques"
Durbanse Onderwyskollege	Four-year Primary Teaching Diploma	Optional subject in fourth year	Nature and scope of learning problems, provision of assistance and referral of pupils
Pretoriase Onderwyskollege	Four-year Primary Teaching Diploma	+ 5 % in third and fourth year	General orientation in respect of children with learning problems
Springfield College of Education	Junior & Senior Primary Teaching Diploma	+ 5 % in third year	The problem child and the gifted child
Hebron Opleidingskollege	Two-year Diploma	+ 5 % in second year	General orientation
Randse Onderwyskollege	Three-year TED	+ 4 % in third year	General orientation

The intellectually inferior pupil

The behaviour deviant

Symptoms

Nervousness

Organic disorders

Psychological disorders

Educational problems

General causes of learning problems

Physical

Intellectual

Neurological

Emotional

Socio-economic-cultural

Pedagogical

Identification and diagnosis

Observation by the teacher

Ordinary class tests

General background of the child

Inventories

Graded material

Scientific apparatus

Diagnostic tests

Use of specialized services in respect of physical and emotional deviations

Remedial treatment

The task of the ordinary class teacher

The basic needs of the child

Attitude towards remedial programme

Emotional warmth

Motivation

Need for group work

Learning methods and suitable aids

Differentiation between pupils

Sympathetic interest

Systematic report

It is evident from the above that as far as the training of teachers is concerned, generally speaking the aspirant teacher is hardly acquainted with problematical formative educational dynamics in general and disharmonious formal educational dynamics in particular at all, not to mention proper mobility in this field.

In addition, usually only vague reference is made to the possible existence of specific impairments and the average teacher strictly speaking remains ignorant of this matter. Apart from the fact that this disqualifies the ordinary teacher from any systematic remedial involvement with children of this kind, he/she is also not in a position to properly support those pupils who are in fact assisted by the remedial teacher or other specialists, because he/she does not actually know what is expected of these pupils.

Table 2.4 provides a few examples of training institutions where Remedial Education or School Guidance (Clinical) as a specialization subject can be chosen in third and fourth year.

In addition the Pretoria College of Education for Further Training offers a further diploma in Remedial Education.

Orthopedagogics and Orthodidactics and the interdependence of learning impairments on problematical formative educational dynamics and disharmonious formal educational dynamics occupy a prominent position in the syllabuses.

Those in possession of this diploma however, remain in service as ordinary teachers. An effort is made to ensure that they will be able to carry out their comprehensive professional obligations (with special reference to the orthopedagogic aspect) more effectively.

In addition there is only one training institution where the subject orthopedagogics, in addition to Psychopedagogics and other pedagogical perspectives, is offered as a recognized separate component of the curricula in respect of all teacher training.

The syllabuses for orthopedagogics in respect of all diplomas at the University of Pretoria include the following in broad outline:

1. Problematical education
2. The causes of problematical education in terms of problematical educational dynamics

TABLE 2.4

TRAINING INSTITUTIONS WHERE REMEDIAL EDUCATION AND SCHOOL GUIDANCE CAN BE DEMANDED AS A SPECIALIZED SUBJECT AND THE NATURE OF SUCH TRAINING

TRAINING INSTITUTION	COURSE	SUBJECT	NATURE OF TRAINING
Durbanse Onderwyskollege	Four-year Primary Teaching diploma	* Remedial Education	Making the prospective teacher conscious of the nature and extent of learning problems as they occur in the school situation. Attention is also paid to appropriate provision of assistance for such pupils and the procedures for referring pupils to specialized institutions.
Pretoriase Onderwyskollege	Four-year Primary Teaching Diploma	* Remedial Education	General orientation in respect of children with learning problems
University of Durban-Westville	Four-year B. Paed. (Prim. education)	* Principles of Remedial Education and School Guidance	General orientation in respect of the underachiever; correlates of learning impairments; psychological correlates, diagnosis and remedial education.
University of Stellenbosch		School Guidance (Clinical)	Special attention is paid to Psychodiagnostics and Paedotherapy. The former includes the following in particular: Differential Diagnosis, where special attention is paid to the educational-psychological aspects of measuring intelligence and personality, problem analysis. Paedotherapeutic strategies embrace the following in particular: remedial strategies, aid in respect of deviation syndromes which relate primarily to problems with a bearing on intellectual functioning, habit and training, anti-social behaviour and emotional deviations.
University of the Western Cape	Diploma in Child Guidance	Guidance	General course in remedial education, behaviour deviations, etc.

* These persons are appointed as ordinary and not remedial teachers.

3. Orthopedagogics as a perspective of Pedagogics
4. Identification of the child with educational and learning problems:
 - (a) Forms in which educational and learning problems appear
 - (b) Means of identification: pedagogical observation, intuition and a variety of media that can be integrated by the teacher
5. Establishing the essentials of the problematical educational dynamics
6. Recognition and evaluation of inadequate learning in the course of the lesson.
7. Making the most of the child's learning potential and evaluating the effectiveness or ineffectiveness of the process of learning
8. Orthopedagogic provision of assistance by the teacher in respect of:
 - (a) the child in the school context
 - (b) the parents and others
9. The problems of the secondary school child, etc.

2.2.4.2 The remedial teacher

To be appointed as a remedial teacher in schools where posts of this kind exist, and in the remedial schools of the Natal Education Department, the adaptation classes of the schools of the Department of Indian Education, and to be appointed to the staff of the Psychological Services of those departments that do in fact have posts of this kind, one must have a Diploma in specialized Education: Remedial Education. One exception to the rule is the Department of Coloured Education where only a Diploma in Junior Primary Education and appropriate teaching experience are required.

The minimum requirements according to the "Criteria for the evaluation of South African qualifications for employment in education" by the Committee of Heads of Education in respect of a one-year Diploma in Specialized Education: Remedial Education, include the following:

- (a) Orthopedagogics, which includes the historical and psychological aspects
- (b) Psychology of the development of the number concept and language
- (c) Background study to learning problems
- (d) Psychological and scholastic testing
- (e) Orthodidactics, which includes remedial procedures.

The admission requirement is either
an approved three or four-year teaching diploma
or
an approved degree or diploma.

Courses for this diploma are offered by the following universities amongst others, as set out in Table 2.5.

For an appointment in the auxiliary classes of the Transvaal Education Department, one requires the Further Diploma in Minimal Brain Dysfunction offered by the Pretoria College of Education for Further Training.

In brief the contents of this course include the following:

Syllabus

Orthopedagogics
Diagnostics
Paedotherapeutic practice
Psychoneurology
Practical work

Curricula

Psychoneurology

The structure and functioning of the nervous system; brain organization; neurophysiological development and dysfunction; brain damage and brain dysfunction - causes and results; intersensory dysfunction; related problems.

Paedotherapeutic practice

Basic principles of Paedotherapy; methods and techniques, cognitive functions; perception and conception; acquisition of language; deviations in language development; consequences and correction; acquisition of mathematical concepts, deviations, consequences, correction; spelling instruction, deviations, consequences, correction; school organization; interpretation of the reports of specialists and use by the teacher; compilation of diagnostic assistance programmes; other school subjects; deviant behaviour manifestations and learning problems; treatment by parents and teachers; affective and environmental problems and dealing with individual problems; counselling of parents; and follow-up procedures.

TABLE 2.5

THE NATURE OF THE TRAINING FOR THE ONE-YEAR DIPLOMA IN SPECIALIZED EDUCATION AND THE UNIVERSITIES OFFERING THIS COURSE

UNIVERSITY	DIPLOMA	NATURE OF TRAINING
UNISA	Diploma in specialized Education: Remedial Education	Background study to psychoneurological learning impairments Orthopedagogics (the learning impaired) Psychology of the development of language and number concept Psychological and scholastic testing Orthodidactics (the learning impaired) Practical remedial education
University of Natal	Diploma in Specialized Education: Remedial Education	Remedial education within the context of Education Background study to learning problems Diagnosis of learning problems Remediation Mental and other impairments Case studies Practical work
University of Stellenbosch	Diploma in Specialized Education: Remedial education	Learning impairments with their strong neural connotation assume an important position. Attention is also paid to the behaviour handicapped child, with special reference to anatomical, physiological, neuro-psychological and pathological aspects. (The part played by problematical formative educational dynamics and disharmonious formal educational dynamics figures prominently throughout the training.)
University of Durban-Westville	Diploma in Remedial Education	Emphasis is placed on the neuropsychological aspects and function phenomena and improvement as well as remediation of shortcomings in learning results. (Little is done in the field of preparing pupils for learning and authentic orthopedagogical aspects.)
University of the Western Cape	Diploma in Remedial Education	Introduction to Psychopedagogics; Orthopedagogics; Orthodidactics; non-verbal learning problems, reading, writing and mathematical problems; practicum

The Bloemfonteinse Onderwyskollege also offers a Diploma in specialized Education: Remedial Education. Persons in possession of this diploma are appointed mainly in the schools and school clinics of the Education Department of the Orange Free State.

The syllabuses also concentrate mainly on the neuropsychological aspects of learning impairment and remediation of specific learning problems.

At present, however, there are also a considerable number of remedial teachers at schools who do not have a Diploma in Remedial Education.

2.2.4.3 The staff of the school clinic

There are clearly specified tasks and general guidelines for these members of staff as set out in certain documents. (For an exposition of the main functions of the school clinics see 1, pp. 145-146.)

One noticeable feature however is that the Committee of Heads of Education sets extremely vague requirements in respect of the appointment of staff for the School Psychological Services (1, p.147).

Certain education departments such as that of the Transvaal and the Orange Free State, do however, lay down specific requirements for the appointment of personnel.

2.2.5 Recruitment of personnel for the scholastically impaired pupil

Remedial teachers

The government does not seem to be making any real effort to recruit personnel specifically concerned with the scholastically impaired pupil. Generally speaking the authorities seem to depend on the availability of suitable persons appearing by chance - hence the remark in respect of unfilled posts (for remedial teachers in particular) that those posts will be filled as trained persons become available.

A study of recruitment practices in respect of remedial teachers has brought to light the following:

- 1) The Department of Education, Cape Provincial Administration, Remedial Education: the organization of remedial auxiliary teams in schools. Conference for School Psychologists, 9-11 April 1980.

At present there are 84 full-time posts for remedial teachers in the Natal Education Department, of which 11 are at remedial schools, 40 at the larger primary schools and the rest are attached to the Psychological Services. Persons are given permanent posts if they have a Diploma in Remedial Education. As an incentive to encourage teachers to specialize in this field a special allowance is paid to those persons filling these posts. Teachers in service are also encouraged by the authorities to register for the course at a university of their choice in that they are afforded the opportunity of taking study leave.

With the exception of a few experimental schools there are no posts for remedial teachers in the schools of the Transvaal Education Department.

Teachers in service are informed by means of circulars of the existence of the Further Diploma in Minimal Brain Dysfunction and the Further Diploma in Remedial Education offered by the College of Education for Further Training. Those who are interested in the education of the scholastically impaired pupil are encouraged to register for one of these courses. In this regard the inspectorate also concentrates on those persons who can man the posts in the auxiliary classes. A maximum of 30 applications per annum are accepted for the Further Diploma in Minimal Brain Dysfunction while a maximum of 120 are accepted for the Further Diploma in Remedial Education.

In the schools of the Education Department of the Orange Free State there is one post for every 300 pupils with a maximum of two posts for remedial teachers for each school. The opinion is that this quota satisfies the need.

An effort is made to ensure that there is a remedial teacher on the staff of every primary school of the Section for Indian Education. Every year the Department sends a circular to all teachers inviting all interested parties to register for the Diploma in Remedial Education offered by the University of Durban-Westville on a part-time basis. A limited number of teachers however are admitted to the course every year.

Recruitment of remedial teachers in the Section for Coloured Education does not take place on an organized basis for it is felt that there are too few teachers in service who satisfy the minimum qualifications for admittance to the course.

With regard to the Department of Education and Training, at present preference is being given to a programme to upgrade the qualifications of teachers in service.

In this Department there is no recruitment for remedial teachers. Courses (in-service training) in remedial education are presented regularly on a country-wide basis by inspectors, and the monthly journal "Educamus" also concentrates on articles on remedial education.

One gets the impression that recruitment of suitable personnel for posts in the Psychological Services is largely dealt with by the heads of the various services, who are constantly on the lookout for persons with the appropriate qualifications and experience and with suitable personality traits.

Training institutions do not undertake recruitment campaigns as such but they do sporadically publicize the fact by way of prospectuses, information brochures and advertisements in the public media that such courses are in fact offered.

2.2.6 Selection of personnel

Apart from the current admission requirements, selection of persons to be trained to teach scholastically impaired pupils seldom takes place on an individual basis in the sense that prospective students are formally summoned.

Since most training institutions however only cater for a limited number of students in the specialized courses, each institution follows its own procedures for selection.

UNISA for example prefers persons who are already involved in remedial work (either at schools or clinics) to register for the Diploma in Remedial Education. Preference is also given to candidates with Psychology III and those who have a degree qualification in one of the official languages. In addition preference is given to candidates who have qualifications in primary education. In 1980, 93 students were accepted for the course.

The Onderwyskollege Bloemfontein selects a student for the Diploma in Remedial Education on the basis inter alia of his/her marks in the subjects Education and Practical Teaching. His/her report card is also studied with a view to gauging his/her disposition and how sympathetic he/she is. Preference is also given to candidates wishing to do the course as soon as they have obtained their Teaching Diploma. In cases where teachers in service wish to register for the course the school principal and inspector concerned are requested to provide a report. During 1980, 20 students out of a total of 50 applications were accepted.

In accepting students for the Further Diploma in Minimal Brain Dysfunction, the Pretoria College of Education for Further Training gives preference to teachers in service who are responsible for tuition in the auxiliary classes and who have teaching experience in the junior primary classes.

Candidates for the Diploma in Remedial Education at the University of Durban-Westville are selected in collaboration with the Section for Indian Education.

With regard to admission to B.Ed., M.Ed. and D.Ed. courses there is no selection of students at some universities apart from the appropriate minimum admission requirements.

Generally speaking students are selected for admission to postgraduate study in counselling and Clinical Psychology mainly because of the limited number of students that can be accommodated.

Enquiries are made among references in respect of the student's behaviour in class during his undergraduate period of study, his personality traits, etc. The lecturers usually also conduct a fairly intensive personal interview with the prospective student so that after considering all the data available an idea can be formed of his personality and the way in which he deals with aspects such as possible aggression, shyness, etc.

At present some of the universities are working together to compile and standardize selection criteria that can be applied in this regard.

Since scientific criteria for selecting students for several specialized posts are still lacking to a large extent, it would appear that most training institutions summarily admit all candidates who satisfy the minimum admission requirements for a specific course, except in those cases where only a limited number of students can be accommodated.

2.3 PRESENT PROVISION OF EDUCATION FOR THE HIGHLY GIFTED CHILD IN THE RSA*

2.3.1 General remarks

Although the general feeling has always been that the educational needs of pupils differ in relation to the intellectual ability of the child, in the last two decades provision of education for the highly gifted child has come to the fore as a problem area in education that merits attention. It is interesting to note that it is the needs of the highly gifted underachiever (scholastically impaired in particular) that has focused attention on the special educational needs of this group of pupils.

The first chapter contains a concise definition of the highly gifted pupil and it is therefore not necessary to repeat it here.

2.3.2 The incidence of highly gifted pupils in the RSA

In contrast to the scholastically impaired child there are no statistics available on the incidence of highly gifted pupils. A committee that was requested by the Natal Education Department to investigate the education of the highly gifted, reported that it is impossible to determine exactly how many pupils can be regarded as highly gifted, but that the figure probably does not exceed more than 5 % of the total school population. The fact that very few data are available on the incidence of giftedness can probably be ascribed to a combination of the following factors:

- . Up to now highly gifted pupils have been taught mainly within mainstream education and in no way have they been identified as a group meriting any form of provision of special education.
- . The identification of the highly gifted is related to the criteria applied for this purpose and it is clear that no one has yet succeeded in formulating a set of uniform criteria for this purpose that can enjoy recognition in all quarters.
- . Interest in the problems surrounding the education of the highly gifted

* The contents of 2.3 has been adapted or taken from HAASBROEK, J.B. en JOOSTE, J.H. Die identifisering van hoogbegaafde leerlinge met verwysing na onderwysprogramme in die opleiding van onderwysers. Pretoria: RGN, 1981; and MACKAY, M., et al, Die begaafde kind in Suid-Afrika: 'n Kort geskiedkundige oorsig met aanbevelings.

child has only come strongly to the fore in the last two decades with the result that a new field of study has been born that will gradually be developed.

The data that are available at present on properly identified highly gifted pupils are an extremely attenuated version of the real numbers of pupils, the reason for this being limited involvement with the highly gifted child up to this point in time.

2.3.3 The identification of the highly gifted child

a. Early identification of the highly gifted

There is general consensus among overseas and local experts in education that early identification of the highly gifted is advantageous and according to some of them this should take place before the fourth school year. Identification of the highly gifted is advantageous only if an assistance programme (special educational programme) is available whereby an endeavour can be made to integrate the highly gifted child into the school programme in a more meaningful way. Until recently, in the RSA education programmes of this kind did not form part of provision of education by the education authorities, with the result that identification took place by chance and very little counselling was given on how to further deal with the highly gifted pupil.

b. Methods of identifying the highly gifted

In overseas countries (the USA, Canada, the United Kingdom, Israel and certain European countries) two methods of approach in identifying highly gifted pupils are encountered, namely identification on the basis of intellectual ability on the one hand, and identification on the basis of a personality profile or an historicity profile on the other. The difference between the two above methods of approach is self-evident in the sense that for the former the intellectual ability of the child is the main if not the only criterion while for the latter other criteria are also applied.

In its discussion of the matter, the committee appointed by the Natal Education Department refers to the problem surrounding identification as follows:

"... it is essential that adequate procedures for their identification should be developed. This is a procedure which is fraught with much difficulty for a great deal of research has yielded largely contradictory and even inconclusive results".

The committee further maintains that identification by the teacher by means of observation of the manifestation of giftedness should be the proper procedure. In this regard the committee therefore favours the second method of approach, since the characteristics of both intellectual as well as creative ability are catered for.

Whenever highly gifted pupils are identified on the basis of their intellectual ability, it is often assumed that those pupils who do extremely well academically are also those with an exceptionally high intellectual ability. In this regard use is made of the results of IQ tests, and intercepts are still determined more or less arbitrarily in the RSA. For its talent survey programme the HSRC takes an intercept of IQ 127 + on the NSAGT, while the Schmerenbeck Centre puts it at IQ 135 + on the NSAIS and IQ 130 + on the WISC-R (Wechsler Intelligence Scale - Revised). The latter has not yet been standardized for the RSA.

When a personality profile is used to identify the highly gifted pupil, the procedure is to involve the pupil in his totality. Here as much information as possible on the pupil is collected to construct a personality profile. The following aspects inter alia are studied:

- . Intellectual ability determined by means of group and/or individual intelligence tests
- . Aptitude and interest determined by means of standardized tests
- . Achievement in school subjects
- . Achievement in intra and extracurricular activities
- . Parents' evaluation of their children
- . Teachers' evaluation of pupils
- . Evaluation of the peer group.

2.3.4 Provision of special education for the highly gifted in the RSA

Recently several education authorities have started investigations into the special needs of the highly gifted and designing programmes to provide for these needs.

With regard to White pupils it is a known fact that the Department of Education Cape of Good Hope has appointed an educational planner (October 1980) for highly gifted pupils. At present proposals are still being formulated and it would appear that special attention is being paid to enriched syllabuses, career planning and rural participation in programmes.

Reference has already been made to the committee appointed by the Natal Education Department in 1978. One of the findings of this committee is that special provision is urgently required and that for this purpose the following should be considered: retraining of teachers; the appointment of special teachers on a regional basis to assist schools and teachers; the development of enriched programmes, and the implementation of a set programme of identification.

The Transvaal Education Department has decided to establish six centres for extracurricular studies the first of which opened in Pretoria this year (1981). Pupils in the senior secondary phase will be able to attend courses at the centres, and those in the other three school phases will be given subject-matter that enriches the syllabus, and different possibilities for presentation will be tried out to supplement this.

As in the case of White schools, a system of differentiated education is also in use in the schools of the section for Indian Education and use is made of HSRC tests inter alia at primary and secondary school level to identify highly gifted pupils. With regard to Black schools, the identification of highly gifted pupils is not regarded as a priority, the problem of children with learning problems being regarded as a matter that merits greater attention. In addition, the large numbers of children in each class and the shortage of properly trained teachers make effective provision of education for Blacks and for Black highly gifted pupils in particular more difficult. In some schools efforts are being made to present enriched programmes but the fact that most teachers lack training makes the task more difficult.

In addition to the above steps taken by the education authorities, several centres have also been established in the RSA which offer assistance and

guidance to highly gifted pupils. The Schmerenbeck Educational Centre in Johannesburg is the first to function on a full-time basis and members of this centre also attended the first international congress on highly gifted children held in Britain in 1975. The Centre provides specialized tuition and assistance for parents and children and also offers courses for gifted children at the Goudstadse Onderwyskollege. To supplement this, assistance and advice are also provided for teachers requesting it. In 1980 900 pupils were enrolled as members of the Centre and during the first term 358 of them were actively involved in classes. During the second term of 1980 550 pupils attended classes.

Besides the Schmerenbeck Educational Centre the following centres operate:

- . The Children's Workshop (Durban)
- . The Association for the Gifted and Talented (SWA)
- . The Questioner's Club (Port Elizabeth)
- . The Questioner's Club (the Western Cape)
- . SOWT Verrykingskursusse vir begaafde kinders (Pretoria)
- . Helderbergse Vereniging vir die Begaafde Kind,
with its office at Stellenbosch (STIMULUS).

Little formal tuition for the highly gifted child is offered at universities and colleges. Unisa's Institute for Continuing Education offers workshops in parent counselling and certain colleges of education offer short courses on the highly gifted child.

2.3.5 The training of staff

In contrast to the numerous teachers in the RSA who have a basic grounding in remedial education and have been trained in this field, there are few teachers with the expertise to provide for the special educational needs of the gifted child. There is a lack of formal courses or specialized training in this regard in particular. The following statement made by the committee of the Natal Education Department illustrates this point: "Teacher training courses in the past have paid scant attention to the education of gifted children. Thus most teachers are inadequately equipped to identify them, to recognize them, or to provide for their special needs" (writers' underlining).

It is evident therefore, and this is also the conclusion that the committee has drawn, that teacher training and retraining of teachers in particular will have to enjoy special attention if the programme for provision of assistance for the

highly gifted child is to succeed.

2.3.6 Summary

The above paragraphs show without question that provision of education for the highly gifted child in the RSA is still in its infancy. There are differences of opinion in respect of basic issues such as the definition of highly gifted and therefore also identification of these children, while there is also no unanimity on the way in which the educational needs of these pupils can best be provided for and yet it is still universally agreed that the highly gifted child is an asset that a country should make the most of no matter what the cost.

2.4 PROVISION OF EDUCATION FOR THE HANDICAPPED CHILD OUTSIDE THE MAINSTREAM OF REGULAR EDUCATION

2.4.1 Introduction

Special education is defined elsewhere in this report as

"... education of a specialized nature outside of the ordinary mainstream, and in addition to this includes

- the psychological, medical, dental, paramedical and therapeutic treatment (including operations),
- the provision of artificial medical aids and apparatus,
- care in a hospital and in a school hostel, and
- the provision of transport and physical escort".

What is important at the moment is that special education is presented outside the regular mainstream, because this is what makes this kind of education functionally different from the education of the handicapped child. Within the context of White education it is known that in this regard special education is primarily the task of the Department of National Education. With the exception of the child with impaired hearing and the scholastically educable mentally handicapped child, this department is responsible for the education of the environmentally deprived, the aurally impaired (deaf and hard of hearing child), the visually impaired (blind, partially sighted, deaf-blind), the physically handicapped, the mentally handicapped (seriously handicapped and severely handicapped), the neurologically handicapped (cerebral palsied, epileptic, pupils with serious specific learning impairments, the aphasically and autistically handi-

capped) and the pedagogically neglected or special care child (including the juvenile delinquent, the emotional behaviour deviant and the psychologically seriously disturbed child).

The fragmented control over the education of the handicapped child in White education, does not apply with regard to the same kind of education for other population groups. The Department of Internal Affairs has two branches for education - one for the Indians and another for the Coloureds. However, Indian education (that is both mainstream and special education) is under the control of one and the same section for education and the same arrangement applies in the case of education for Coloureds. With regard to the Black population groups, ordinary and special education are accommodated in a similar way within the same structure of control, that is the Department of Education and Training.

2.4.2 The laws applying to special education for the RSA

The four laws formulated to make provision for the institution, maintenance and management of, control over and the provision of financial support with regard to schools where certain types of education are provided, are the following:

- . The Educational Services Act (no. 41 of 1967 as amended)
- . The Indians Education Act (No. 61 of 1965 as amended)
- . The Coloured Persons Education Act (No. 47 of 1963 as amended)
- . The Education and Training Act (No. 90 of 1979)

It is noticeable that in the case of the Afrikaans version of the first mentioned act which applies to Whites, reference is made to the handicapped child (gestremde kind) which includes deaf, hard-of-hearing, blind, partially sighted, epileptic, cerebral palsied, physically handicapped children and children suffering from a handicap and who are designated as handicapped children by the Minister in consultation with the administrators for whom provision has to be made under the act. Two of the other acts refer to the "deviant child" (afwykende kind) and in the case of the Education and Training Act, reference is made to the handicapped. A list of categories of handicapped or deviant children is not given in the three last mentioned acts. It is interesting to note that in the English version of the acts concerned reference is consistently made to the "handicapped child".

Special education is defined in more or less the same words in these four acts and in all cases provision is made for education or training of a specialized nature to adapt to the needs of the handicapped/deviant and which also includes

professional education, psychological, paramedical, therapeutic, medical and dental treatment, care and maintenance in a school hostel or hospital or other institution, transport and physical escort during transportation.

For the sake of completeness reference must also be made to the following two acts:

- . The Mentally Retarded Children's Training Act (No. 63 of 1974)
- . The Mental Health Act (No. 18 of 1973).

The first-mentioned act makes provision for the training of White mentally handicapped children (defined as children who are exempt from compulsory schooling as a result of "ineducability", but who are trainable and who will benefit from a training programme) in centres which are linked to institutions established by the Department of Health for the mentally handicapped on account of the second act mentioned above. In the case of the Act on Special Education for Blacks, reference is made to the "mentally handicapped child" as a child who cannot benefit sufficiently from a suitable educational course, but who can in fact be trained and who is able to benefit from a suitable training course, while no reference is made to the mentally handicapped child in the cases which apply to the education for Indians and Coloureds.

2.4.3 Provision of education for the child with impaired hearing

a. Definitions and criteria for identification

When children with impaired hearing are referred to, three further distinctions are made, that is deaf children, hard of hearing children and partially hearing children. With regard to White education, the first-mentioned two categories of children fall under schools of the Department of National Education, while the Education Departments of the Cape and Natal make provision for children with partial hearing and also in schools for Coloureds and Indians. In schools for Blacks, a distinction is made between the deaf and the hard-of-hearing. In a document compiled by the Inter-departmental Advisory Committee with regard to Handicapped Children (IACHC committee) and approved by the Committee of Heads of Education as a directive for the identification and placement of handicapped children, it is pointed out that impaired hearing is a continuum which extends from "totally deaf", that is without any perception of sound, to "normal hearing", where problems at certain speech frequencies may impede the acquisition of natural speech and language. In the light of this, the same document refers to deaf children as children with such a serious degree of hearing loss that they

have very little or no hearing perception for speech, and consequently they cannot acquire speech or language naturally. According to the full definition of the above-mentioned document a deaf pupil is regarded as someone who -

1. has such a serious degree of hearing loss that he has a very slight or no auditory perception for speech at all;
2. is unable to acquire speech or language naturally as a result of loss of hearing;
3. already has a serious hearing loss at birth or where it set in at an early age before speech and language could be acquired;
4. requires education according to the usual educational methods of schools for the deaf, that is special teaching methods, based mainly on the use of senses which are primarily of a visually receptive nature with the acoustically receptive in a secondary role. (However, where residual hearing is in fact utilized, it plays a subordinate role and is mainly used for the improvement of speech with the aid of electronic sound amplification apparatus.)

With regard to children who are hard-of-hearing, the IACHC committee points out that the hearing loss of these children will probably necessitate their attending a school for the hard-of-hearing for their whole school career, but that there is no need for the educational methods used for deaf children. Furthermore it can be stated that quite a while back the Department of National Education accepted in principle that deaf pupils and pupils who are hard of hearing should be taught separately.

b. Available facilities and statistics

At present there are five subsidized schools in the RSA for deaf White pupils and one for pupils who are hard of hearing. These schools housed 1 106 pupils during 1980, which means that pupils with impaired hearing in these five schools constituted 1 135 per thousand of the total number of White pupils (Van Niekerk, et al. 1981, p.4).

In 1978 there were 100 Asian pupils with impaired hearing at school in the RSA. In the same year there were 207 488 Asian pupils in ordinary schools, which consequently constitutes an incidence of 0,481. According to the 1979 annual report of the Department of Indian Affairs (Section for Education) funds have been made available for the establishment of the new NV Naik School in Newlands where provision will be made for 260 pupils of whom 210 will be boarders

(Department of Indian Affairs, Annual report 1979, p.10).

In the annual reports of the Department of Coloured Affairs no distinction is made between the different handicaps and physically and mentally handicapped pupils are grouped together (Van Niekerk, et al. 1981, p.6). However, in a document made available by the Department of Internal Affairs (Coloured Affairs) to the HSRC, it appears that this department at present subsidizes two schools, for the deaf, that is the Dominican School for the Deaf at Wittebome which takes in predominantly English-speaking pupils and the Worcester School for the Deaf which houses mainly rural pupils who are predominantly Afrikaans-speaking. Provision has not yet been made for separate schools for the hard of hearing and consequently the above two schools also house the hard-of-hearing. However, deaf pupils and pupils who are hard of hearing are taught in separate classrooms as far as possible (Department of Internal Affairs; Coloured Affairs, 1981, p.11).

Currently there are 365 pupils at the Dominican School and 309 in the school at Worcester, which is a total of 674 (514 of whom are boarders).

The 365 pupils of the Dominican School receive education up to Std 7 and the syllabuses of the department are adulterated and adapted to the needs of the deaf. Speech reading/lip reading and the development of speech and language ability are emphasized. There is a nursery school section with 100 three to seven-year-olds, the main objective here being the acquisition of speech and speech reading. The older girls learn sewing and domestic science and the boys learn upholstery and tailoring. Furthermore the enrolment at the school increases annually and the present accommodation is already limited to some extent (Department of Internal Affairs; Coloured Affairs, 1981, p.20).

The 305 pupils at the school at Worcester also only receive education up to Std 7. This school does not have a nursery school section, with the result that children are admitted to the school at an advanced age. As in the case of the Dominican School, the older girls learn sewing and domestic science and the boys learn leather work and agriculture, as well as part-time painting and carpentry. Enrolment at the school increases annually and the school intends taking over the buildings and grounds of the school for epileptics situated next-door to establish a nursery school. Funds have already been granted for the establishment of school and hostel accommodation for 150 pupils who are hard of hearing (up to std 10) as well as for the expansion of subject fields and workshops for pupils who are hard-of-hearing (Department of Internal Affairs; Coloured Affairs, 1981, p.21).

According to the report of the Department of Education and Training already referred to, this department has recently made a survey in the RSA, the independent Black states and the national states with a view to planning for the future. This survey shows that there are approximately 1 811 deaf or partially hearing distributed throughout the above areas for whom educational facilities are being planned (Department of Education and Training, 1981, p.3).

The department provides services to all schools for the deaf in the above areas, that is in the form of guidance by a panel of inspectors of special education. The Planning Section bears the responsibility for the planning of physical facilities and curricula (Department of Education and Training, 1981, p.3).

Currently there are 15 schools for the deaf/the hard-of-hearing in the RSA, the independent states and the national states, that is six in the RSA, one each in the Ciskei, Transkei, Gazankulu, Qwa Qwa and Venda, two in KwaZulu and two in Bophuthatswana. At present these schools house 1 840 pupils (Department of Education and Training, 1981, p.7).

With regard to pupils who are hard-of-hearing, an investigation is already being conducted with a view to establishing classes for the hard-of-hearing at ordinary schools. However, trained staff are not available and there is the danger that unsympathetic and ignorant principals may do them more harm than good.

Pupils with hearing problems in ordinary schools are provided with hearing aids (when and where such cases are brought to the attention of the department) and such pupils are also placed closer to the teacher in the classroom (Department of Internal Affairs, 1981, p.7).

c. Recruitment, function and training of staff

The services of teachers in possession of ordinary teacher's diplomas and/or degrees obtained at training colleges of provincial education departments and/or universities are pre-eminently used for the education of deaf pupils in the RSA. The Department of National Education does not have a training centre aimed specifically at the training of teachers for special education. Teachers appointed at schools for the deaf (Whites) to date, usually have neither the experience nor the qualifications for educating deaf pupils. In-service training is presented by principals and experienced teachers to orient newly appointed teachers for their task. Such teachers are also requested to follow specialized teacher's training courses in educating pupils at universities offering such courses

(Gouws, 1981a,p.18).

At schools for the deaf provision is also made for staff who have to render specialized auxiliary services, namely medical, paramedical, nursing and school psychological services. Provision is made for speech therapy services to pupils.

Diploma and/or degree courses in special education for deaf pupils are presented inter alia by the following institutions:

- . University of South Africa: Diploma courses in the education of four types of handicapped pupils inter alia pupils with impaired hearing
- . University of Stellenbosch: Diploma in Specialized Education: (impaired hearing)
- . University of Cape Town: Diploma in Specialized Education: the deaf and the partially hearing.

With regard to the training of teachers for schools for pupils with impaired hearing under the control of the Department of Education and Training, it can be mentioned that such teachers may follow an in-service course (practical and theoretical) extending over two years to obtain the Diploma in Special Education. The theoretical part of this course consists of four courses compiled by the department and which include the following:

- . Physiologically educational aspects of the impairment
- . History of the education of the type of impairment
- . Orthodidactics with regard to the type of handicap
- . The psychologically educational aspects

Teachers who have already completed the course are used in a follow-up course/ programme where they give guidance to new staff, help with the placement and promotion of pupils, give information to parents and do further research on all aspects of the education of the particular handicap (Department of Education and Training, 1981, p.6).

2.4.4 Provision of education for visually handicapped pupils

a. Definition and criteria for identification

The primary handicap of all pupils admitted to schools for the visually handicapped, is a visual defect which makes them unable to benefit from the

education presented in an ordinary school for pupils with normal vision. Several deviating eye conditions and visual acuities are found between these two extremes which make each class group an extremely heterogeneous group with regard to their educational requirements (CHE: pp. 8,9). Visually handicapped pupils often have secondary deviations for example speech defects, specific learning problems, perceptual and co-ordination problems, etc. Additional consequences of deviating eye conditions and low visual acuity which may cause serious limitations in education, include inter alia photophobic problems, myopia, contraction of the visual field, fluctuating visual acuities (CHE, pp. 9,10). Psychological problems as a result of the eye problems can be added to this.

The term "visually handicapped" refers to all children who are taught by means of special educational methods and with the aid of special educational requirements as a result of a visual handicap. Consequently the blind and the partially sighted are included.

Blind means children whose visual handicap is such that they cannot be educated by means of a visual medium of instruction and who consequently have to be educated mainly by means of braille and other tactual media. There are degrees of difference in visual ability, but seen from an educational point of view the common factor is that their visual ability is inadequate for use as the main medium of instruction (CHE, pp.10, 11).

The vision of pupils with partial vision is such that they can in fact be taught through the visual medium. They are nevertheless handicapped to such an extent that they have to be taught by means of special educational methods and with the assistance of special educational aids.

The deaf-blind are handicapped both aurally and visually. A wide variety of forms is possible, from totally blind and totally deaf to partially sighted and hard-of-hearing. The highest incidence of multiple handicaps is found among this group of pupils, that is secondary handicaps apart from those of vision and hearing (CHE, p.11).

The latest criteria for the identification and admission of children to a school for the blind, as approved by the Minister of National Education, read as follows:

"They are pupils who - either

1. cannot perceive light, that is cannot distinguish light from darkness;

- or cannot distinguish or recognize any objects, but nevertheless have light perception; or
2. can perceive objects only as shadows or outlines or in motion or stationary; or
 3. can count fingers to a distance of one metre from the eye, or who have a visual acuity of 1/60 according to the Snellen test; or
 4. can count fingers to a distance of three metres, or who have a visual acuity of 2/60 to 3/60 according to the Snellen Test; or
 5. have a visual acuity of 4/60 to 6/60 according to the Snellen Test (snellen: 6 metres). The latter test has to be supplemented and coordinated with a near vision test (Reduced Snellen Test and Vocational Near Vision Test: 38 cm). In the case of children with a visual acuity of approximately 6/60 Snellen (confirmed by a near vision test) anomalies of the eyes have to be present as well as signs of progressive conditions of which the prognosis is such that visual acuity will eventually, but not much later than the age of 18 years, be reduced considerably" (CHE, p.31)*

With regard to the partially sighted, the criterion applied is that the better eye must not be weaker than 6/60 and not better than 6/24 according to the Snellen Test. When applications are considered the eye conditions of individual pupils can be taken into consideration when the visual acuity of the pupil falls beyond the above visual acuity. Furthermore it is recommended that near vision tests (Reduced Snellen Test and Vocational Near Vision Test: 38 cm) be performed in addition to the far vision test before a final decision is made. It is also stressed that numeric and descriptive criteria are not accepted as an unfailling standard. The personality characteristics and the adaptability of a particular pupil can play a role when he/she is on the border of one of the categories. The scholastic history of a particular pupil will also play a role in this regard (CHE, p.31).

b. Available facilities and statistics

Two schools provide for the needs of blind White children in the RSA, that is the School for the Blind at Worcester and the Prinshof School for the Partially Sighted and the Preparatory School for the Blind in Pretoria. In 1980 the first mentioned school housed 253 pupils (159 boys and 94 girls) and the latter school

* Free translation of the Afrikaans document

provided for 266 partially sighted pupils (164 boys and 102 girls) (Gouws, 1981 b (1) and Gouws, 1981 b (2), p.7).

The New Horizon School in Pietermaritzburg provides education to blind Indian pupils. In 1980 this school had 101 pupils and according to the 1979 annual report of the department, funds have been made available for the establishment of a new section which will contain specialist rooms. (Department of Indian Affairs, Annual Report, 1979, p.9.)

With regard to the provision of education for blind Coloured pupils, it can be pointed out that the Athlone School for the Blind (Bellville South) admits blind as well as partially sighted pupils since there is not yet a school for the partially sighted. There are 180 pupils (1980) from Sub A to Std 10. The syllabuses for Arithmetic (sections like Geometry) and Geography (sections like map reading) are adapted so that the pupils can follow.

Pupils who are not yet ready for education, are placed in the nursery school section. Furthermore pupils are admitted throughout the year with the result that the figure usually increase by six to eighteen in the course of the year. A section for the deaf-blind was instituted in 1974 and at present there are two classes with four pupils each. Classes for severely mentally handicapped children were also instituted in 1975.

The older boys and girls receive training in canework. The boys concentrate more on items made from thick cane, while the girls receive training in weaving and matting for chairs.

All the pupils of the school are boarders, so that attention can be given to medical care and formative education after hours. At present the school has no problems with accommodation, since the funds are available to expand the buildings according to the need.

An advisory council looks after the interests of the school - seven representatives are appointed by the Minister and six are selected by the school (Department of Internal Affairs; Coloured Affairs, 1981, pp.17-18).

The Department of Education and Training makes provision for blind and partially sighted Black pupils in special schools, that is for those pupils who are totally blind or who are so severely handicapped visually that they cannot make progress in a normal school without special educational aids.

Curricula of the ordinary school are followed. The schools make use of braille typewriters and thermoform machines throughout. Partially sighted pupils are provided with large print books.

According to a survey made by the department in the RSA, the independent and national states, provision has to be made for an additional 634 visually handicapped pupils in the future.

Currently there are eight schools for the visually handicapped, i.e. two in the RSA, two in Bophuthatswana and one each in the Transkei, KwaZulu, Gazankulu and Venda, and 585 pupils are at present being taught at these schools (Department of Education and Training, 1981, pp. 11,12).

c. Recruitment, function and training of staff

The following universities or tertiary educational institutions offer a course which is relevant to the training of teachers of blind and partially sighted pupils:

- . University of South Africa: A full specialized course for teachers of blind children. Prospective candidates must have a recognized teacher's diploma or a degree and a recognized teacher's diploma.
- . University of Pretoria: no specialization course in the education of blind pupils, but in the education of the partially sighted. The higher National Educational Diploma and the B.Ed. degree with the endorsement "Special Education" are offered.
- . University of Stellenbosch: Diploma for teachers of special classes (DTSC) and a post-graduate Diploma in Special Education. No course which is specifically directed towards the education of blind or partially sighted children is offered.

Initially comprehensive in-service courses were offered by the Worcester School for the Blind for new teachers, but this was stopped when Unisa started a specialized course. Currently the School for the Blind at Worcester offers a course in Braille to new teachers. Teachers are expected to complete this course and the school issues a certificate to successful candidates.

For an exposition on in-service training courses (practical and theoretical)

presented by the Department of Education and Training for partially sighted pupils, reference is made to the paragraph concerning in-service training courses for children with impaired hearing offered by this department (see Par. 2.4.3.c)

2.4.5 Provision of education for physically handicapped pupils

a. Definition and criteria for identification

Physically handicapped pupils may be defined as pupils with chronically disturbed functions or chronic deviations (congenital or acquired) of any of the following systems of the body:

- . cardiovascular and hematopoietic system
- . nervous system
- . skeletal system
- . muscular system
- . endocrine system
- . respiratory system
- . digestive system
- . secretory and excretory system (CHE, p.32).

The reasons for sending physically handicapped pupils to separate schools are the following:

- . There are physically handicapped pupils who progress well scholastically at ordinary schools, but who are excluded from all physical activities due to their physical handicap or disease.
- . The paramedical assistance which physically handicapped pupils receive in schools for special education are indispensable to some of them.
- . In schools for the physically handicapped pupils can participate actively in types of sport according to their physical ability or from which they will benefit physically and mentally.
- . The pupils are not regarded as "different" at these schools.
- . Job placement on completion of the school career is handled by specialized and experienced staff in the case of a school for physically handicapped pupils, whereas the same matter is left in the hands of the parents in

the case of an ordinary school (Gouws, 1981 c, pp.3,4).

The Educational Services Act (Act No. 41 of 1967) indicates the criteria which have to be met before a child is admitted to a school for physically handicapped pupils. These criteria are:

- . The child must be physically handicapped.
- . He must be educable. (In this case it means that the pupil must still be able to learn something and must not be so severely handicapped that he is pre-eminently dependent on medical care and nursing.)
- . The child must be unable to cope at an ordinary school or his presence there must be detrimental either to himself or to other pupils (CHE, p.7).

b. Facilities and statistics available

Currently there are four schools for physically handicapped White pupils in the RSA and the total number of pupils in these schools is 563. However, this figure is not an exact indication of the number of physically handicapped White pupils, since not all the pupils at these schools are physically handicapped. The schools also house pupils with specific learning problems. On the other hand there are also pupils with physical handicaps at schools for neurally handicapped pupils (Gouws, 1981 c, p.8 and the comment of J.M. de Nysschen).

Provision is made for pre-primary, primary and secondary education. Some schools admit only pre-school children. Pupils in the pre-primary section receive physiotherapy and occupational therapy to promote their motor activity and perception. One of the primary objectives is to prepare the child for formal education.

In addition to the above, education is presented to the pupils on primary educational level in terms of their potential. Compulsory examination subjects include inter alia the languages, History, Nature Study, Geography, Hygiene, General Science, etc. With regard to secondary education, one of the objectives is to prepare the pupils for a future occupation. In the junior secondary school phase the education is of a generally formative nature, the majority of subjects are compulsory and the syllabuses are differentiated. Differentiation in the secondary school phase includes a choice for the pupil with regard to fields of study, subjects and subjects on two levels (higher or standard grade) (Gouws, 1981 c, p.13, 14).

The Department of Internal Affairs (Indian Affairs) does not make provision for physically handicapped pupils by way of separate schools. Consequently no particulars are available on the numbers of physically handicapped Indian pupils.

With regard to Coloureds, the Astra School for the physically handicapped was opened in Rondebosch at the beginning of 1980. This school can accommodate 18 to 20 pupils. A school for 150 physically handicapped pupils is planned in Philippi. As soon as the school has been completed, the pupils will be transferred there from the existing school. Consequently data with regard to the exact number of physically handicapped Coloured pupils receiving education is not available (Department of Internal Affairs; Coloured Affairs, 1981, p.23). The Cape Association for Cripple Care is the sponsor.

The report of the Section Special Education of the Department of Education and Training refers to "cripples" and includes in this category: physically crippled children, cerebral palsied, brain-injured and epileptic pupils. For educational purposes orthopaedic cripples are classified in the category of the "normal" pupils. As a result of the grouping together of the pupils concerned, data are not available on the numbers of pupils receiving instruction. At most it can be stated that the establishment of needs already referred to, indicates that a total of 3 175 crippled children (mentioned in various categories above) currently need education in the RSA, the national and independent states (Department of Education and Training, 1981, p.13).

Currently there are two schools in the RSA and one each in the Ciskei, Transkei, KwaZulu, Gazankulu and Bophuthatswana.

Orthopaedic cripples who are sufficiently mobile or for whom effective transport can be organized attend ordinary high schools. Many of these pupils do a commercial course. A high school of full and equal status is in an advanced stage of planning. This school will initially house the blind and the crippled and will be residential.

Cerebral palsied pupils and pupils with brain damage who cannot proceed beyond Std 5 (18 years of age), are discharged or are admitted to the after-care sections. There are no classes for cripples in special schools (Department of Education and Training 1981, pp. 13, 14).

c. Recruitment, function and training of staff

Teachers of physically handicapped pupils (Whites) usually have ordinary teaching diplomas and/or degrees obtained at colleges of education of the provincial educational departments and/or universities. Consequently it often happens that when these teachers are appointed they have neither the experience nor the qualifications for teaching these pupils. In-service training programmes are handled by principals and experienced teachers with a view to orienting newly appointed teachers. In addition to these in-service training courses teachers can also do diploma courses in special education for cerebral palsied pupils or those in remedial education offered by certain universities (Gouws, 1981 c, p.23).

2.4.6 Provision of education for educable mentally handicapped pupils

a. Definition and criteria for identification

Pupils who cannot benefit sufficiently from the ordinary tuition provided by the normal curriculum of education, but who are nevertheless educable and who do not fit in with a special group of handicapped pupils identified by Act No. 41 of 1965, receive education of a specialized nature in special classes or schools of the provincial education department in terms of Section 14 of Government Notice No. R2 029 of 12 November 1971. According to the education departments, such mentally handicapped pupils can benefit from a suitable course; however, they differ from the majority of children with regard to mental ability that they

- . cannot benefit sufficiently from the normal instruction provided in the normal course of education, but are nevertheless educable;
- . require special education to facilitate their adaptation to the community; and
- . should not attend an ordinary class in an ordinary school, since such attendance may be detrimental to themselves and to other pupils in that class.

These pupils can be identified on the basis of the following criteria (Vaughan, p.2):

- . School progress to explore the scholastic background of the pupils (the first and most important criteria)

- . Achievements as measured by standardized scholastic tests
- . Biographical data to explore the socio-economic background of the pupils
- . Medical reports
- . Personal structure investigation
- . Results of aptitude tests
- . Intellectual ability.

This group of pupils falls more or less within the IQ group, 50 to 80, of the intellectual ability of the White school population in the RSA.

The following criteria are being used inter alia in the case of education for Indians:

- . Severe scholastic impairment
- . too old for the ordinary class
- . an IQ ranging between 50 and 79.

Diagnosis with a view to placement is done by school psychologists and the consent of the parent has to be obtained before the Director of Education authorizes the placement (Vaughan, pp. 6,7).

Special education is called adaptation education in the Section for Education and Training of the Department of Internal Affairs (Coloured Affairs) and is found mainly in primary schools. The following criteria are used inter alia when placement is considered:

- . The pupil must have failed at least once
- . his scholastic progress must still be poor
- . he must not be too young compared with the other pupils in his class
- . his present progress has to be regarded as handicapped according to standardized scholastic tests (Vaughan, p.5).

In this department the intercepts for placement in adaptation education are an IQ of approximately 50 to 75. However, this placement policy is flexible and adaptable in the light of the heterogeneity of the population. In this case permission must also be obtained from parents for placement. Pupils are referred for placement by inter alia principals, parents, welfare organizations, hospitals,

and the Institute for Personal Guidance of the University of the Western Cape. Final specification for placement is done by the Director of Education (Vaughan, p.6).

The Department of Education and Training makes no provision for intellectually handicapped pupils at present, but plans to create suitable facilities for pupils from Std 1. The intention is to institute special classes at existing primary schools where education is compulsory. At present syllabuses are being compiled for 201 such schools (Vaughan p. 7).

b. Facilities and statistics available

With regard to the education of the mentally handicapped, the following table of data is provided with regard to the number of pupils admitted to special classes/schools, the age distribution of these pupils, the number of schools/classes and what percentage of the total school population it constitutes (Vaughan, pp. 7-9).

In addition it should be mentioned that the figures for the Transvaal Education Department have remained unchanged over the past number of years and no major changes are expected in the near future, except that which may be necessitated by the growth of the school population. The decrease in pupils who have received special education in the Department of Education of the Cape of Good Hope since 1976 may perhaps be ascribed to the expansion of remedial educational facilities and the introduction of the practical course. Recently the number of pupils in special education has also decreased in the schools of the Natal Education Department, probably for the same reasons as in the Cape Province. In the schools of the Department of Education of the Orange Free State the number of pupils receiving special education has remained constant over the past number of years and it is expected to remain unchanged in the foreseeable future. With regard to the Department of National Education, the number of pupils receiving special education in the department's schools for special education is not known. However, these schools show constant growth and it is expected that the number of mentally handicapped children will increase proportionately. These pupils have a dual handicap (Vaughan, 1981, pp. 7,8).

The Section of Education of the Department of Internal Affairs (Coloured Affairs) is planning vast expansion of facilities for mentally handicapped pupils and the introduction of 50 additional classes at primary schools annually. Each primary school must have three or more such classes. One problem with regard to the

TABLE 2.6: DETAILS WITH REGARD TO THE NUMBER OF PUPILS WHO RECEIVE SPECIAL EDUCATION AS MENTALLY HANDICAPPED PUPILS IN THE RSA

Education authority	Number of pupils	Distribution of pupils according to age	% of school population
a. Whites			
Cape Province	10 058	6 230 (7-13 yrs) in 640 special classes at 273 primary schools 3 828 (14 yrs and older) in 9 special schools	4,4
Natal	1 803	773 (7-13 yrs) in 88 special classes at 65 primary school	2,0
OFS	Not available	75 special classes and 7 special schools	ca 3,0
Transvaal	14 552	4 167 (7-11 yrs) in special classes and 10 385 (12 yrs and older) in special schools	2,8
b. Indians			
	1 500	109 special classes (no special schools)	0,7
c. Coloureds			
	Not available	426 adaptation classes in 2 000 primary schools	ca 1,0
d. Blacks			
		Facilities will be available from 1982 at 201 ordinary primary schools	

institution of the classes and the placement of pupils is the shortage of school psychologists. Currently the department has one school psychologist for every 30 000 pupils (Vaughan, 1981, p.8).

In contrast with the above more school psychologists are available in the education for Indians with the result that identification of pupils can be done earlier. Ten additional classes for remedial education are made available each year and the constant increase of these classes will have an effect on the number of pupils receiving special education. However, there will still be a great need (Vaughan, 1981, p.9).

c. Recruitment, function and training of staff

In a submission to the HSRC, Prof. T. van B. Vaughan writes as follows about the availability and training of teachers:

The provincial education departments and the Department of National Education have no difficulty, in filling the posts for special classes with teachers who have basic teaching experience. Many teachers of special classes also have a specialized diploma in special education. The percentage of teachers of special classes who have an applicable specialized diploma in addition to a basic educational qualification, is as follows for the different departments:

Cape Province: 57,5 %, Natal: 39 %, OFS: 60 %. Percentages with regard to the Transvaal Education Department and the Department of National Education are not available. The set-up is not as bright in the special schools. Although almost all the teachers for the scholastic or academic subjects have at least basic educational training, there is a scarcity of well-trained teachers for occupationally oriented subjects. Most of these teachers do in fact have the necessary qualifications in their respective technical or occupational fields, but a number of them do not have an educational qualification as such. Figures are not available.

The Section for Coloured Education has teachers who have basic educational qualifications in all its adaptation classes. In addition two or three per cent of the teachers have a specialized diploma in special education. However, many of the latter teachers are soon considered for promotion and are consequently lost to adaptation education.

All the special class teachers of the Department of Indian Education have a basic educational qualification. In addition 60 % of them have a diploma in special education (Vaughan, 1981, pp. 9, 10).

2.4.7 Provision of education for the mentally handicapped trainable and special care child

a. Definition and criteria for identification

This paragraph concerns mentally handicapped trainable children and mentally handicapped special care children. The first-mentioned group of children is also known as mentally retarded (Mentally Retarded Children's Training Act, No. 63 of 1974) or as seriously mentally handicapped (SMH) children. The latter group can also be described as mentally severely handicapped children. The Department of National Education sets the following criteria for admitting mentally handicapped trainable children to training centres (Gouws, 1981 d, p.3).

1. An IQ of approximately 30 to 50, measured as reliably as possible, and provided there is no other secondary handicap which is of such an obstructive nature that it will prevent the child himself or the other children from meaningful participation in the training programme.
2. An IQ higher than 50, but provided such a child is found to be ineducable and consequently exempt from compulsory schooling.
3. A chronological age of 6 to 18 years at first admission, but provided that permission be obtained from the secretary in exceptional cases for the admission of a few three to six year-old children.
4. The physical ability to be mobile with a view to satisfactory participation in the training programme as well as the acquisition of certain motor skills for helping himself and for possible participation eventually in sheltered work, no matter how elementary.
5. An ability either to communicate meaningfully on admission or, after observation and examination, to give an indication of the latent ability to be able to communicate meaningfully with training, so that the child is at least able to make his needs known and to understand and carry out instructions.

6. The absence of psychological deviations such as psychoses or other mental handicaps which will make the effective training of the child impossible. Briefly: Apart from the handicap which makes him ineducable, the child has to have both the mental and the physical abilities and skills which will enable him to benefit from the training programme.
7. On admission, candidates must already have been properly toilet trained.

According to measured intellectual ability the mentally handicapped trainable child is consequently regarded as the child with an IQ of between 30 and 50. However, the IQ does not play a very important role in the identification of the children. The Mentally Retarded Children's Training Act states that it concerns children who are exempt from compulsory schooling as a result of "ineducability", but who are trainable and who will benefit from a training programme.

Criteria similar to the above will be set by the Department of Education and Training, except that the seventh requirement is omitted. The education authority responsible for education for Coloureds sets an age requirement of 6 to 16 and, in the opinion of the school, school psychologist and the Head of Psychological Services, the child has to be so seriously mentally handicapped that he will be unable to make the necessary progress at school, but will nevertheless benefit from the training programme of a training centre. Although the IQ figures usually vary between 25 and 50, border cases on both sides are also considered and admitted for a probationary period (Grobelaar, 1981, pp. 8,9).

In contrast with the preceding mentally handicapped special care children are characterized by a very low intelligence figure (the "untrainable" level, i.e. IQ: 0-30). The term "mentally handicapped special care child" has been proposed instead of "untrainable" which has the negative connotation that no development is possible.

At present this group of children is excluded with regard to the training centres to which children, described in the previous paragraph, are admitted (here reference is made specifically to White children and the centres of the Department of National Education). However, similar limitations are applicable in the case of training centres for Coloured children which are controlled by the Department of Internal Affairs (Coloured Affairs). In the case of Indian children, the Indians Education Act, Act No. 61 of 1965, does not distinguish between educable and trainable children with the result that trainable children

may be admitted to the special schools which are under the control of the department concerned. However, mentally handicapped special care children are excluded. Subsidization of training centres for Black trainable children is still very limited and consequently the regulations have not yet been defined carefully (Grover, 1981, p.3).

b. Facilities and statistics available

Currently there are 34 subsidized training centres for mentally handicapped trainable White children in the RSA and 13 offer hostel accommodation. Furthermore there are three government training centres connected to institutions for the mentally defective which also have hostel accommodation for the children and a fourth has recently been approved. There are also five private training centres which are not subsidized. Building projects have already been launched, others are still being planned, and the completion of these projects will help to meet the needs which still exist (Grobbeelaar, 1981, p.13). With regard to Coloureds, the current provision is approximately one-third of the actual need (there are ten centres at present and more are being planned) while there is a great shortage of facilities for Blacks (Grobbeelaar, 1981, p.14).

With regard to the mentally handicapped special care child, Grover points out that the incidence of these children is between three and four per 1 000 of the total population or that they constitute approximately 4 % of the total number of mentally handicapped children. As already stated, mentally handicapped special care children are not admitted to the training centres of the Department of National Education referred to in the previous paragraph. However, the Department of Health, Welfare and Pensions accepts the responsibility of these children to some extent and executes this responsibility in the following ways:

- . By admitting special care children to government care and rehabilitation centres or to sections of hospitals;
- . by paying a per capita subsidy in some cases to private centres which look after the special care child; and
- . by indirectly paying "Single Care Grants" to selected persons (Grover, 1981, pp. 3,4).

Furthermore, Grover alleges that the government care and rehabilitation centres and also the sections at hospitals providing for special care children do not

meet the requirements for special care children since the buildings are often old, the staff-child ratio inadequate, and although a multi-disciplinary team does in fact exist, the number of posts in certain categories of essential professional staff is insufficient. Private residential and day centres also vary considerably with regard to available facilities. With regard to day centres, the government pays a per capita subsidy of R2,00 per day (attendance), but only in the case of White pupils. Day centres for other population groups receive no subsidy (Grover, 1981, p.5).

As far as is known there are 31 residential and day centres for Whites at present, three for Coloureds, three for Blacks and two which make provision for more than one population group (Grover, 1981, p.6).

c. Recruitment, function and training of staff

Favourable staff provision scales for training centres for mentally handicapped trainable children of the Department of National Education have been approved but not yet implemented. Provision is being made for implementation distributed over a few years and it is a known fact that the Department of Internal Affairs (Coloured Affairs) will make use of the same schools. The provision appears more or less as follows:

- . One teacher for every ten children or fewer than ten children;
- . one physiotherapist for every 30 children (maximum of three): only where there are sections for cerebral palsied children
- . one occupational/speech therapist for every 50 children (maximum of three)
- . one sociopedagogue per centre (a part-time post up to 80 children and full-time from 81)
- . furthermore, provision is made for the institution of posts of deputy head and departmental heads (Grobelaar, 1981, p.24).

A teaching qualification is a requirement for Whites, and in the other departments preference is given to qualified teachers. However, there is no training institution that offers full-time or even part-time training for prospective teachers for mentally handicapped trainable children. Unisa now offers a course which can be followed on completion of a three-year teacher's training course. The training is in the form of teletuition and leads to a diploma in specialized education (seriously mentally handicapped) (Grobelaar, 1981, p.28). Teachers attached to the Department of Education and Training will in future also be able

to follow an in-service training course to obtain the D S E. Lecturers will be compiled by the department and the course will extend over two years (Department of Education and Training 1981 b, p.4).

2.4.8 Provision of education for the neurologically handicapped child: the cerebral palsied

a. Definition and criteria for identification

In the document made available by the CHE (CHE, pp. 12 and 32) cerebral palsied pupils are defined as follows: "They are pupils with disturbed function caused by a defect or injury of the brain but whose main problem is not that of mental retardation. The defect or injury can be localized or diffused, and can occur before, during or at any time after the birth of the child. Where organic brain injury is the cause of neuro-motor, perceptual or communication deviations these deviations can be present either singly or jointly.

Aphatic children are included here if they can fit into the organization of the school and can benefit from the formal and formative education provided for cerebral palsied children."*

To tie up with the above, reference is made to the following medical clinical classification (p.12):

- . The spastic who may be a mono-, hemi-, tri- or quadriplegic
- . the athetoid (continual, involuntary movements, big and slow)
- . the ataxic group (straddler)
- . the atonic group (very limp)
- . the mixed group (spasticity and athetosis)
- . the group with rigidity (inflexible)

The preceding motor disturbances can be amplified by disturbances with regard to the sensory, development and behaviour. In addition, the cerebral palsied may also manifest the following (one or more) secondary handicaps: mental handicap (approximately 25 % have subnormal intelligence); epilepsy (approximately 33 %); visual impairment (25-50 %); auditory impairment (approximately 40 %); and other

* Free translation of the Afrikaans document

problems with regard to perception and hearing (CHE, p.13).

The identification and diagnosis of children as cerebral palsied are usually done by a doctor or neurologist who establishes the above handicaps after a thorough examination. For admission to a school for the cerebral palsied the child has to comply with the following criteria (compare the Educational Services Act):

- . He has to be cerebral palsied (the responsibility of the doctor or neurologist)
- . He has to be educable
- . He has to be unable to cope at the ordinary school or his attendance of the ordinary school has to be detrimental either to himself or to other pupils.

b. Facilities and statistics available

With regard to cerebral palsied White pupils, Dr J.A. Rossouw of the Muriel Brand School provides the following statistics. In March 1981 a total of 1 004 cerebral palsied pupils, of whom 565 were boys and 439 were girls, attended the 11 schools for White cerebral palsied pupils (Rossouw, 1981, p.5).

These figures do not reflect the total number of cerebral palsied pupils of the schools, since most schools also house brain-injured pupils. There is only one school for cerebral palsied Coloured pupils (Eros School) and at present this school has 215 pupils, their ages ranging from three to 18 years. The Spes Nova School for cerebral palsied Indian pupils housed 65 pupils in 1979, but the facilities have been expanded to provide for 110. Cerebral palsied Black pupils are taught with the epileptics, the crippled, the brain-injured etc., in schools for the crippled, so that further details are not available.

As already mentioned there are 11 schools for Whites, one each for Indians and Coloureds and the Blacks are accommodated in seven schools for cripples (of which two are in the RSA and the remainder in the independent and national states).

The schools for Whites make provision for pre-primary, primary and secondary education. Furthermore, there are usually special sections in these schools in which provision is made for pupils who are handicapped with regard to language,

perception and/or mental ability. Particular attention is being paid to physio- and speech therapy as well as to medical-surgical treatment at pre-primary level. The primary section follows the same syllabuses/curricula as the ordinary provincial schools, while secondary education for the cerebral palsied consists of a junior and senior secondary school phase (Gouws, 1981 e, pp. 10,11).

The Eros School for cerebral palsied Coloured pupils also has a nursery school section (16 pupils between three and six years). On admission thorough study is made of the pupils' physical, neurological, personality and mental abilities in order to be able to rectify the deficiency by means of the necessary education and particularly to prevent the establishment of physical deviations. There is close collaboration with the Red Cross Memorial Hospital and the school also has the service of two doctors at its disposal. Furthermore, there are nine physiotherapists, two logotherapists, five occupational therapists and two psychologists on the staff. The therapy section of the school treats outpatients on a voluntary basis two afternoons a week. Pupils are transported by bus from as far as Tiervlei and Steenberg since there are no hostels. When the new school building is completed in 1981, there will be accommodation for 350 pupils as well as hostel facilities for 30 children. A hostel is being planned for 120 children. In the 1979 annual report of the Department of Indian Affairs, plans for building a residential school for 260 pupils are mentioned (Department of Internal Affairs, Coloured Affairs, 1981, p.22 and 2, p. 10).

c. Recruitment, function and training of staff

The teachers of cerebral palsied White children pre-eminently have ordinary teaching diplomas and/or degrees obtained at the colleges of education of the provincial education departments and/or universities. Consequently when teachers are appointed they often have neither the experience nor the qualifications, for teaching the above children. However, in-service programmes are presented by principals and experienced teachers with a view to orienting the newly-appointed teacher with regard to the extremely specialized formative and formal educational task confronting him. At present diploma courses in special education for cerebral palsied pupils or for remedial education are available at universities for these teachers.

2.4.9 Provision of education for epileptic children

a. Definition and criteria for identification

Epileptic children are defined as children who are subject to epileptic fits

(including hidden and subclinical cases) or who manifest behavioural disturbances which have to be ascribed to epileptic processes and who also comply with one of the following descriptions:

- . The main problem of these children is their epileptic condition and as a result their treatment, formative and formal education cannot be coped with in the normal course of education. The nature, multiplicity or severity of the epileptic fits contributes to this.

- . These children manifest mental or physical deterioration, or specific learning handicaps or behavioural disturbances which are the result of their epileptic condition, or that which is connected with it, or that which is regarded as having developed from it, to such an extent that the child requires specialized treatment and education which are not provided in the normal course of education (CHE, p.32).

Different kinds of epilepsy can be distinguished, inter alia, Grand Mal, Petit Mal and a large variety of other kinds. Epileptics are brain-injured and consequently there is a strong possibility that they may be hyperactive or have a poor ability to concentrate. Furthermore, perceptual and emotional problems as well as motor and co-ordination abnormalities are not excluded. Poor finer co-ordination of the muscles, poor comprehension of direction and defective eye-hand co-ordination may also be present (CHE, p.15).

With regard to the current practice of identification of epileptic children, it can be said that each of the three schools for epileptics under the control of the Department of National Education has an electro-encephalogram by which the presence of epilepsy in a particular child can be confirmed. Each of these schools also avails itself of the services of a visiting neurologist who visits these schools at least once a week and who is remunerated by the Department of National Education (Gouws, 1981 f, p.5). In addition, most of the big provincial hospitals have a clinic for children with epilepsy with all the facilities needed for diagnosis. Every child who applies for admission to a school for epileptic children, can be referred to one of these hospital clinics for a neurological examination (Gouws, 1981 f, p.6).

The Department of Education and Training follows the same criteria for admission as the Department of National Education, but it is not known to what extent the education authorities for Indians and Coloureds also implement the same criteria.

b. Availability of facilities and statistics

Last year (1980) the three schools for epileptics of the Department of National Education housed 616 pupils. These schools had a total of 550 pupils in 1979 and a total of 300 in 1974. Two of these schools set the age for admission at about five years and the third school at three years of age. Under normal conditions a child may remain at school until he is 21 years of age, and at least one school permits pupils to stay on at school after this age under unusual conditions (Gouws, 1981 f, p.11).

Because of the heterogeneity of the pupils, classes must inevitably be smaller (i.e. fewer pupils per teacher). Furthermore, these schools must provide for:

- . nursery school education
- . primary education for mentally normal children
- . primary education for mentally subnormal children
- . education for pupils who, on the basis of their age, cannot be regarded as primary school pupils, but who can only do the most elementary school work owing to their limited mental abilities, also called the "special group"
- . junior secondary education to children whose mental abilities vary from subnormal to above normal
- . senior secondary education to the few pupils who are interested and who have the mental ability to benefit from it (Gouws, 1981 f, pp. 11,12).

As far as is known, the Department of Internal Affairs (Indian Affairs) does not provide separately for epileptic Indian pupils. However, there is in fact a school for epileptic Coloured children in Worcester where 77 pupils are being taught up to Std 7. The average IQ of these pupils is less than 65 and adaptation education is available up to Std 4. All the pupils are in hostels and present accommodation is limited to such an extent that an average of 35 applications for admission have to be turned away annually. However, a thorough study of the type and degree of incidence of epilepsy in each pupil is made, with a view to giving the best treatment possible. Land has already been bought in Kuils River and a school for 300 epileptic pupils with the necessary hostel facilities is being planned. As soon as this school has been completed, the pupils who are in the Worcester School at present will also be transferred to the new school (Department of Internal Affairs, Coloured Affairs, 1981, p.23).

There are six schools for Black pupils: in the RSA (2), the Ciskei (1), Transkei (1), KwaZulu (1), Gazankulu (1) which provide for epileptic pupils. These schools are actually known as schools for cripples, but also house cerebral palsied, brain-injured and epileptic pupils (Department of Education and Training, 1981, p.12).

c. Recruitment, function and training of teachers

The recruitment of teachers for epileptic children is done by means of advertisements in newspapers when there are such vacancies.

With regard to the Department of National Education, the qualifications required for the teachers for epileptic pupils, are the same as for all other schools under the control of this department. Teachers are encouraged to obtain a diploma in special education at the University of South Africa. The opinion has been expressed that teachers of epileptic children should be specially trained for maintaining discipline and for teaching mentally handicapped epileptic pupils. However, special training with a view to instructing the epileptic child is not necessary (Gouws, 1981 f, pp. 20,21).

2.4.10 Provision of education for the Group C specific learning disabled child

a. Definition and criteria for identification

According to a definition of P.A. van Niekerk (UP) children with specific learning impairments are those who learn in an inadequate way as a result of aggravating conditions. It is fairly generally accepted that this inadequate learning is connected with a dysfunction in the central nervous system, and consequently it is also referred to as a psychoneurological learning handicap. However, irrefutable evidence of this has not yet been found (Gouws, 1981 g. p.7).

A bulletin of the Department of Education of the Cape of Good Hope mentions the following significant characteristics of the child with specific learning handicaps: motor abnormalities; perceptual problems; emotional problems; reversals; faulty auditive and visual memory; hyperkinesis and perservation (Gouws, 1981, pp. 1-7).

The criteria applicable for identification/ admission are as follows according to the CHE document (p.33):

- . The pupil has to reveal an alarming lag with regard to one or more of language, reading, writing, spelling and arithmetic.

- . The pupil's lag must be the result of a serious specific learning impairment - i.e. the inability or learning deficiency revealed by the child has to be manifested from a particular psychoneurological dysfunction.
- . The possibility of learning problems which are the result of more external factors has to be eliminated.
- . The pupil must preferably not be older than twelve years of age.
- . The pupil must preferably already have received orthodidactic assistance with regard to his handicap.
- . The pupil must reveal an average or higher mental potential on an individual scale and an illuminative, characteristic response pattern must be indicated.
- . The presence of one or more or a combination of the following symptoms will facilitate the final decision: "Hard" neurological signs, "soft" neurological signs and/or EEG abnormalities.

Characteristic behavioural deviations such as inter alia hyperactivity, attention and concentration disturbances, emotional lability and impulsivity, aggression and outbursts of rage, lies, theft, poor socialization and adaptation, fear of new situations and defective perseverance, poor self image and self-confidence, lack of the ability to plan and abstract, as well as memory disturbances.

Problems with regard to co-ordination, laterality and dominance. Visual and auditive perceptual shortcomings with resultant reading, speaking and language handicaps.

With regard to early identification of the child with specific learning problems, the same document refers to its importance and the fact that it normally occurs early in the first phase of the ordinary school. All the different provincial education departments follow more or less the same pattern and procedure for identification and assistance with regard to these pupils. Pupils with serious learning handicaps are usually identified by a process of elimination, namely when they make little or no progress by part-time or full-time remedial aid. If these pupils cannot return to ordinary education after a reasonable period of full-time remedial education, but are dependent on full-time intensive orthodidactic aid for an indefinite period or permanently, they are identified

as pupils with serious specific learning impairments (CHE, 1981, p.45)

The Department of Internal Affairs (Coloured Affairs) makes provision for remedial education for pupils from Sub A to Std 5, but especially from Sub A to Std 2. The following admission requirements are set:

- . They have to have normal, (or slightly sub-normal) to above normal intellectual abilities, but must not be candidates for adaptation classes.
- . Compared with the median age for their standards, their intellectual ages have to indicate that they have the ability for normal achievement in their particular standard,
- . nevertheless they have to reveal specific handicaps, and/or have under-achieved for one or more years with regard to the standard expected of pupils in reading and/or playing and/or Mathematics in their particular standards.

In order to identify pupils who may be considered for remedial education, the class teachers have to be consulted first with regard to possible underachievers in their classes. The pupils' achievements in reading, spelling and Mathematics are then compared with the average marks of the class. This preliminary selection is followed by a few tests, inter alia the Old NB Individual Scale (the Fick scale) or the New South African Individual Scale and standardized individual scholastic tests (Department of Internal Affairs, Coloured Affairs, 1981, pp. 7,8).

b. Availability of facilities and statistics

With regard to Whites, children with serious specific learning impairments are housed mainly at schools for cerebral palsied pupils (Gouws, 1981 f, p.12). Those with specific learning impairments form a significant percentage of the number of pupils at these schools. In 1980 2 387 brain-injured pupils, cerebral palsied pupils and pupils with specific learning problems attended 11 schools for cerebral palsied pupils. These schools are all parallel-medium schools and make provision for pre-primary, primary and secondary education. There are usually special sections for pupils with language, perceptual and/or mental handicaps. The primary section of the school follows the curricula and syllabuses of the local provincial education department, while the secondary section also distinguishes between a junior secondary school phase and a senior secondary school phase (Gouws, 1981 f, pp. 12-15).

With regard to the instruction of serious specific handicapped Coloured pupils, there are 14 remedial classes (196 schools) at present. It is expected that this number of classes will be increased, but it is not known how many specific handicapped pupils will be involved (Department of Internal Affairs, 1981, p.2).

c. Recruitment, selection and training of teachers

Little is known about the recruitment, selection and training of teachers for serious specific handicapped pupils in the service of the educational authorities for Coloureds, Indians and Blacks. The Department of Education and Training is presenting an in-service course for teachers at all special schools and consequently these teachers are reached in this way.

In the Department of National Education teachers of these pupils are pre-eminently in possession of ordinary teaching diplomas and/or degrees obtained at colleges of education of the provincial education departments and/or universities. However, in-service training programmes are in fact presented by principals and experienced teachers to orient newly-appointed teachers. Diploma courses in special education for cerebral palsied pupils are also available at certain universities (Gouws, 1981 f, p.30).

2.4.11 Provision of education for the brain-injured child

a. Definition and criteria for identification

Brain-injured children should be distinguished from those with specific learning impairments in the sense that they are a heterogeneous group characterized by their varying intellectual abilities and behavioural deviations. Hyperkinesia, acute perceptual problems, perseveration, distractibility and affective lability are usually more prominent than in the case of cerebral palsied pupils or pupils with specific learning impairments (Gouws, 1981 h, p.1). Their motor abilities are either not affected at all or the motor deviation is very slight (CHE, p.14). The identification and diagnosis of brain-injured children is usually the task of the medical doctor or neurologist who determines the above handicap after a thorough examination. These children are then referred to schools for the neurologically handicapped.

b. Facilities and statistics available

Few details are available about the number of pupils who may be classified as brain-injured in the different population groups. The Department of Internal Affairs (Indian Affairs as well as Coloured Affairs) and the Department of Education and Training provide no statistics with regard to these pupils and it has to be assumed that they probably also end up in schools for the cerebral palsied or crippled. As mentioned before, these pupils are housed in the schools for the cerebral palsied of the Department of National Education, but exact figures are not available.

c. Recruitment, selection and training of teachers

Read Paragraphs 2.4.8 (c) and 2.4.10 (c) in this regard.

2.4.12 Provision of education for the infantile autistically handicapped child

a. Definition and criteria for identification

Pupils with infantile autism are defined as pupils with a clinically recognizable syndrome which starts before the age of three and is characterized by introvert and abstract behaviour, linguistic disturbances, ritualistic compulsive phenomena, and is also described as follows:

- . Autism must be present as a symptom, i.e. self-withdrawal and an obsessive insistence on uniformity.
- . It must have started in early childhood, before the age of two, at the utmost three years.
- . Persistent ritualistic and compulsive phenomena must be present (CHE, 1981, p. 34).

Identification of these pupils is done inter alia, on the basis of the following criteria:

Introverted and detached behaviour which can border on complete withdrawal from reality in many spheres.

A general and persistently disturbed emotional relationship with people. Acute, illogical fears are frequently shown. These children are difficult to control and may also become aggressive.

Apparently serious mental retardation, with periods of normal, nearly normal or even exceptionally high mental functioning or skill may occur.

A language disturbance is common. There may be a complete absence of speech and a confused use of prepositions. Speech may be purely echolalic without there being any real communication, etc.

A frantic desire to keep the environment unchanged. This is manifested in severe distress when furniture is moved, for instance, or when unfamiliar foods are served.

A refusal to make eye or other sensory contact.

Ritualistic compulsive behaviour is common, for instance when the pupil continually spins an object or persists in rocking backwards and forwards. There is often a pathological pre-occupation with certain objects or parts of objects, without regard to the true function of such parts.

Motility deviations such as hyperactivity, hypo-activity, unusual bodily postures, etc., may occur.

The perceptual experience of sensory stimuli is often abnormal. There may be a lack of sensitivity to pain of temperature, there may be no reaction to a loud sound, or there may be overreaction to a stimulus - all of this in spite of the fact that, organically, the senses function correctly.

Defective development of body image and personal identity.

To date only the Department of National Education makes provision for special education for children with infantile autism. Parents take their children to clinics, family doctors, hospitals and specialists for examination and become confused and worried by the conflicting findings. Proper diagnosis with constructive advice can be made by a psychiatrist at a psychiatric clinic of a children's hospital (Gouws, 1981 i, p.7).

In Cape Town autistic Coloured children are cared for under the guardianship of the Association for Autistic Children. A school for autistic Coloured children (50) is at present in the planning stage in Cape Town.

b. Facilities and statistics available

As already mentioned, the Department of National Education makes special provision for the child with infantile autism. Prior to 1970 such children were housed in government institutions for the mentally deficient, private institutions or in private schools under the control of the Camphill Movement. As a result of recommendations contained in the report of the Committee of Investigation into the Treatment, Education and Care of Autistic Children (1971), the first school for such pupils in the RSA was established in Cape Town. During 1977 a separate unit for autistic children was established at the New Hope School for Cerebral Palsied Children in Pretoria.

The Vera School for Autistic Children in Cape Town housed 27 pupils in 1976 and they were divided into units, as follows:

- . A nursery school unit consisting of two classes
- . A primary unit consisting of two classes
- . A transitum unit also consisting of two classes
- . A junior unit consisting of a boys' class and a girls' class
- . A special class (Gouws, 1981 i, pp.9, 10)

A new school for 50 to 60 pupils is currently under construction in Cape Town

The unit for autistic children connected to the New Hope School for Cerebral Palsied Children is organized in a way similar to the above school. Of course this unit is able to use the administrative, paramedical and psychological services of the New Hope School (Gouws, 1981 i, p.11).

In these two schools education was initially aimed at independence, communication, socialization and motor abilities, but as progress was made with reading, writing and arithmetic, instruction in formal school subjects such as language, Mathematics, Social Studies, Natural Sciences, Geography and History was gradually introduced (Gouws, 1981 i, p.10).

About 31 pupils are at present housed in both the Vera School in Cape Town and the New Hope School in Pretoria.

In addition to the above there is also a private school in Johannesburg which provides for about five to seven children, while there are other institutions as well (e.g. Rudolph Steiner Schools) which admit such pupils. The Alexandra Rehabilitation Centre in Cape Town has a separate unit for autistic children who cannot be accommodated elsewhere (Bührmann, 1981, pp. 1,2).

According to Dr Bührmann the incidence of infantile autism among Whites is approximately two per 10 000 of the schoolgoing population. The incidence among Coloured children is even lower and appears to be one-fifth or one-sixth of the figures for White children. Among Indian children the incidence is even lower, while it is virtually unknown among the Black population (Bührmann, 1981, p.1).

c. Recruitment, function and training of teachers

The education of the autistic child is a highly specialized branch of special education and makes exceptional demands on the teachers. It requires specialized knowledge and skill. A teacher training course which will be suitable with a view to teaching pupils with infantile autism, has already been implemented at the University of Stellenbosch (DSBE: Autism (advanced diploma or post-graduate)).

2.4.13 Provision of education for the pedagogically neglected special care child and the pedagogically neglected juvenile delinquent

a. Definition and criteria for identification

This concerns pupils admitted to schools of industry and reform schools respectively. Jointly these schools are known as Children's Act schools and house those declared by the children's court as children in need of care in terms of the Children's Act.

Section 1 of the Children's Act (Act No. 33 of 1966) defines a "child in need of care" as a child who

- a. "has been abandoned or is without visible means of support; or
- b. has no parent or guardian or has parents or a parent or guardian who do or does not or are or is unfit to exercise proper control over that child or
- c. is in the custody of a person who has been convicted of committing upon or in connection with that child any offence mentioned in the First Schedule

to this Act; or

- d. cannot be controlled by his parents or guardian or the person in whose custody he is; or
- e. is an habitual truant; or
- f. frequents the company of any immoral or vicious person, or is otherwise living in circumstances calculated to cause or conduce to his seduction, corruption or prostitution; or
- g. (i) begs; or
(ii) being under the age of twelve years engages in any form of street trading within the area of jurisdiction of a local authority unless that local authority has by means of bye-laws made under section twenty-two or any other law, prescribed that such a child may engage in that form of street trading and unless he does so in accordance with bye-laws made under section twenty-two; or
(iii) being not under the age of twelve years but under the age of sixteen years engages in any form of street trading within the area of jurisdiction of a local authority in contravention of bye-laws made by that local authority under section twenty-two; or
- h. is being maintained apart from his parents or guardian in domestic circumstances which are detrimental to his interests and whose parents or guardian cannot be found or have failed to make suitable provision for the care and custody of the child although they have been called upon to do so; or
- i. is in a state of physical or mental neglect."

Chapter V of the Children's Act makes provision for the establishment and upkeep of inter alia, schools of industry, reform schools and children's homes as institutions to which special care children can be referred for committal and education over a relatively long period. These children's homes are controlled by the Department of Health, Welfare and Pensions. Children residing in these homes attend an ordinary school or a special school while special care children who are also behaviour deviants are sent to a school of industry, and serious cases to a reform school. Generally speaking only those children who have reached secondary school age are sent to schools of industry. Children who

are committed in terms of the Children's Act of 1960 but who are too old to attend primary school and who manifest behaviour deviations which make it undesirable to send them to an ordinary secondary school, are either sent from the children's home or directly from the parental home to a school of industry (Gouws, 1981 j, p.6).

In addition to the above schools, subarticle 11(1) and (2) of Ordinance 20 of 1968 of the Provincial Administration of the Transvaal makes provision for the procedure to be followed in admitting a child to a clinic school. What it boils down to is that if a child attending a school or a special school is found to manifest unfavourable behaviour traits which the community will not tolerate or which handicap the studies of such a child at school or the community in general, but that measures for special education may help the child to behave better, he/she can be placed under the supervision of an authorized official or a suitable person or sent to a clinic school or a hostel. The parent can appeal against the Director's decision. Children attending clinic schools can be replaced in an ordinary school when it is felt that they have improved (Gouws, 1981 j, pp. 6,8).

b. Facilities and statistics available

Schools of industry house special care children who for several reasons (especially on account of the severity of their behaviour deviation) cannot be brought up in children's homes or clinic schools of the provincial education departments. Children are usually only sent to schools of industry at the age of fourteen but this can happen at an earlier age (9 years).

Reform schools house children whose behaviour deviation is so serious that they cannot be kept at a school of industry. In terms of Article 50 (5)(6) of the Children's Act (Act No. 33 of 1960) a person under the age of 21 who is serving a prison sentence, of which the unexpired period does not amount to less than four months, can be transferred to a reform school (Gouws, 1981 j, pp. 8, 9).

Reform schools provide for the education of pupils from an elementary level to Std 10. Homogeneous grouping in respect of intellectual ability for example is hampered by the fact that both English and Afrikaans-speaking pupils are accommodated in the same schools.

At present there are 8 schools of industry for White boys and 10 for White girls, the former accommodating 1 139 boys and the latter 906 girls (1980). There are two reform schools accommodating 172 pupils, one of which is a girls' school (30 pupils) and the other a boys' school (142 pupils) (Gouws, 1981 j, p.12). All these schools (schools of industry and reform schools) are maintained by the Department of National Education. All the children in the above schools are committed by a commissioner of child welfare or transferred by the Minister to the schools from children's homes or foster care.

c. Recruitments, function and training of teachers

The recruitment of both teachers and hostel staff for schools for special care pedagogically neglected children takes place through the placement of advertisements in newspapers. The functions of these persons can be defined briefly as the formal tuition and re-education of the children.

The Department of National Education requires a teaching diploma as the minimum qualification for appointment as a teacher at a school of industry.

2.4.14 Provision of education for the emotionally based behaviour deviant child

a. Definition and criteria for identification

Children with emotional and behaviour deviations are divided according to nature and degree of impairment into one of three broad groups, namely:

- . Those with minor problems who can get along in mainstream education with specialized assistance
- . Children with moderate problems who should be removed temporarily from the mainstream or their parental homes and should receive more intensive therapeutic assistance and re-education in a particular environment
- . Children with serious problems who, in terms of the Children's Act (1960), are found to be special care children (or uncontrollable children) and are committed to a children's home, school of indus-

try or reform school (Cloete, 1981, p.1).

The last-mentioned group of children has been discussed in Paragraph 2.4.12 and we shall now take a look at the first two groups.

Without going into detail it can be said that these pupils manifest certain traits at the physical and emotional level, behaviour and mental/normative deviations occur, as well as unfavourable domestic circumstances and scholastic impairments and there is a need for special care (Cloete, 1981, pp. 1-4).

The criteria for identification differ among the various culture and population groups. The criteria are basically the same for Whites, Coloureds and Indians, although in the case of Indians and Coloureds these have not been implemented as yet. The following are used as criteria for Whites: unfavourable domestic circumstances, emotional and behaviour deviations, moral misbehaviour and scholastic impairment which handicap the child in his normal growth and development, adjustment and progress in his parental home, school and society. The whole situation is such that special assistance is imperative (Cloete, 1981, p.5).

The criteria applied for admission to and procedures for the placement of children in a special school, unit, class, section or institution in respect of Whites, include the following: orphans or foster-care children; estranged or divorced parents; single parent; unsuitable parents; incompatibility with parents, stepparents or other members of the family, the keeping of a parent in an institution or hospital; temporary or repeated absence of the parents from the home; medical reasons; choice of subject or school; parents who have been transferred; immigrant children, etc. In the case of the TED the criteria for placement in a clinic school are the following: desperate domestic circumstances; uncontrollability at home or school; the need for prolonged intensive pedotherapy the parents set a poor moral example; broken families with corrupt circumstances, etc. (Cloete, 1981, pp. 6,7).

b. Availability of facilities and statistics

No reliable or comparable figures are available for the various provincial

education departments. The number of cases referred to the Psychological Services of the various provincial education departments range from 1,5 % to 4,3 % of the total school population. No statistics are available for Indians, Coloureds and Blacks (Cloete, 1981, p.7).

At present there is no provision of education at pre-school and pre-primary level for these children. The TED is the only department that provides for primary school pupils by way of two specialized clinic schools. All the other education departments however, provide therapeutic hostel placement where the children attend ordinary schools (Cloete, 1981, p.8). Moore of the TED points out that in 1980, 7 534 pupils were treated by the staff of the child guidance clinics and the committals were as follows:

Clinic school transfers	360
Therapeutic hostel placement	253
Referrals for committal	414
Other (schools for the cerebral palsied)	494

c. Recruitment, function and training of personnel

The recruitment of experienced teachers and suitable auxiliary service and hostel staff is of primary importance here. The requirement for teachers is the ordinary training as provided by colleges and universities. In addition, training in orthopedagogics, sociopedagogics and orthodidactics can also be required. According to Moore, purposeful in-service training with the possibility of obtaining an appropriate diploma in dealing with behaviour deviant pupils should be introduced (Moore, 1981, p.7).

2.4.15 Provision of education for the psychologically seriously disturbed child

a. Definition and criteria for identification

At present the identification of psychologically seriously disturbed children is the responsibility of the School Psychological Services, child guidance clinics, private medical and psychological practitioners, welfare organizations, the outpatient, inpatient and casualty sections at hospitals. Sometimes people voluntarily commit themselves (Schlebusch, 1981, p.1).

b. Availability of facilities and statistics.

It is difficult to determine the actual figures for psychologically disturbed children especially in the case of certain population groups. The distribution of psychopathology among adults and adolescents is as follows:

* Moderate or serious	+ 20 %
* Subclinical symptoms or symptom formation	+ 60 %
* No symptoms	+ 20 %

In Natal the incidence rate for psychologically seriously disturbed children is probably in the region of 2,68 %, according to the nature of and environment in which the samples are made (Schlebusch, 1981, p.2).

Details for the other provinces are not available.

In Natal there is no provision of education for the psychologically seriously disturbed child who is admitted to the general hospital (Schlebusch, 1981, p.3). According to Anderson and Robertson the day centre of the Red Cross Memorial Hospital for children in Cape Town has the same problem in the sense that the facilities provided are inadequate. In their case pupils of this kind are in fact admitted to the relevant hospital school (Anderson and Robertson, 1981, p.3).

2.4.16 Provision of education for the aphasically/linguistically handicapped child

a. Definition and criteria for identification

An aphasic child usually manifests no deviations when it comes to physical appearance. Because of a brain abnormality this child has difficulty in interpreting and processing in a meaningful way the language that he hears and expressing the relevant language messages correctly and effectively, verbally speaking and otherwise. This child therefore has a malfunction in the brain areas that are responsible for the reception of aural impressions and their meaningful interpretation and processing, as well as contact with the area that makes possible effective expressive language usage (Gouws, 1981 k, p.1). To tie up with the above, the following statement: the aphasic child is always linguistically handicapped, but the opposite

is not always true: the linguistically handicapped child is not necessarily aphasic (Uys, 1981, p.1).

It should be mentioned that the diagnostic requirements, as set out in the report of the Committee: Education of children with minimal brain dysfunction, are also applicable to the identification of the aphasic child and that an in-depth analysis of the child's language is essential, inter alia by means of interviews, clinical observation, tests, etc. (Uys, 1981, p.6).

b. Availability of facilities and statistics

Specific figures, especially with regard to the different population groups, are not available. Mention should be made of the fact however, that about 10 % of the pupils in a certain school for the cerebral palsied were aphasic, although one should bear in mind that these children are often also diagnosed as mentally handicapped (Uys, 1981, p.5).

At present provision is made for many linguistically handicapped children at institutions such as schools for the aurally handicapped, autistic children, the cerebral palsied, etc.

c. Training of teachers

Teamwork on the part of different specialists is required in providing assistance for the aphasically and linguistically handicapped child. Basic training as a teacher plus a course in clinical education as offered by the University of Stellenbosch is necessary (Du Preez, 1981, p.4).

2.5 PROFESSIONAL PERSONNEL CONCERNED WITH THE EDUCATION OF THE CHILD WITH SPECIAL EDUCATIONAL NEEDS

2.5.1 Education for Whites

a. Professional personnel attached to the head office of the provincial education departments and the Department of National Education

Each of the five education authorities has a School Psychological and Guidance Service the head of which is a member of staff at head office.

In the case of the TED there are five posts for assistant head (Orthopedagogics, Orthodidactics, Vocational Guidance, Sociopedagogics, Speech Therapy), and three posts for assistant head (one each for Guidance, Remedial Education and Special Education) for each of the other provincial education departments. Postgraduate training is required throughout and the functions are concerned mainly with organization, administration, control, planning and inspection. In the case of the Department of National Education, the head is known as the Inspector of Education (School Psychological and Guidance Service) and he is required to have at least a M. degree in Psychology and a teaching diploma. He must also be registered with the South African Medical and Dental Council.

b. Professional personnel attached to the schools of the provincial education departments and the Department of National Education

Only the TED has head of department posts for educational guidance at all special and secondary schools. This department also has guidance posts at secondary schools while there are orthopedagogues attached to each of the four clinic schools (here a B.Ed. degree is required).

The other three provincial education departments all have teacher psychologists at secondary school level and remedial teachers at primary school level. In the case of the Education Department of the Orange Free State, schools with more than 300 pupils have one remedial teacher and those with more than 600 pupils often two.

The situation in the Department of National Education is different. There is a clinic attached to each of the 47 schools of the department and an application has been submitted to the South African Medical and Dental Council asking it to consider allowing these clinics to train interns. Senior school psychologists (2 posts), school psychologists (50 posts) and assistant school psychologists (60 posts) render services at these clinics. An honours degree and higher is one of the requirements for appointment. The post of sociopedagogue has also been introduced.

c. Professional personnel attached to the school clinics of the provincial education departments

School clinics are separately functioning units that are spread geographically over the provinces, their task being to render an effective service. The number of school clinics and the various disciplines that the personnel represent vary according to the size and needs of each province. School clinic personnel are mainly responsible for evaluating, identifying, assisting, placing and referring pupils who manifest any sort of problem. Although they are attached to the school clinic they also work as travelling personnel mainly in the provincial schools.

In 1979 the TED had 42 such clinics to which 279 professional personnel were attached.

Each clinic availed itself of the services of the following professional personnel:

- orthopedagogue
- vocational guidance officer
- educationist (Orthodidactics)
- sociopedagogue
- speech therapist
- occupational therapist

The school clinic services of the other three provincial education departments correspond to a greater extent and these departments are therefore discussed together. Altogether the Department of Education Cape of Good Hope, the Education Department of the Orange Free State and the Natal Education Department have 15, 5 and 4 school clinics respectively. All three departments also avail themselves of the services of senior school psychologists, school psychologists, assistant school psychologists, remedial teachers and speech therapists. The Education Department of the Orange Free State also appoints sociopedagogues at the school clinics and the Natal Education Department occupational therapists and teachers for speech correction.

d. Medical and paramedical personnel

The school medical service of the provincial education departments ensures

that effective medical services are rendered to all pupils. This service usually comprises a chief medical inspector of schools, medical inspectors and school nurses who visit all schools on a routine basis.

An example of the medical and paramedical personnel involved in the schools for special education of the Department of National Education are those attached to the Elizabeth Conradie School for physically handicapped pupils at Kimberley. The following medical and paramedical personnel are worthy of mention:

- doctor
- nurse
- dentist
- physiotherapist
- occupational therapist
- speech therapist
- school psychologist

Obviously the service of other medical specialists, for example neurologists, audiologists, geneticists, ophthalmologists, pediatricians are enlisted on an ad hoc basis whenever necessary.

2.5.2 Education for Coloureds

A school psychological and guidance service has been introduced with the following persons attached to the head office:

- Inspector of education (Psychology) - head of the service
- Senior subject inspector (Guidance, Testing, Psychoclinical)
- Senior subject inspector (Adaptation and Remedial Education)
- Inspector of education (Special Education)
- Inspector of education (Children's Act schools).

There are 1 to 4 guidance teachers at every primary school with Std 5 and 6 classes, as well as every intermediate and secondary school. There are also guidance counsellors at certain secondary schools. The latter differ from guidance teachers in that they have a higher qualification (usually a B. degree with Psychology as a major subject and a teaching diploma). Children's Act schools and special schools avail themselves of the services

of teacher psychologists. Eight primary schools have remedial classes with teachers who have undergone in-service training.

The thirteen regional offices have senior subject inspectors and subject inspectors (Psychology) who are responsible for the School Psychological Services in the particular areas.

The Athlone School Clinic is the only school clinic that serves Coloured pupils and here, in addition to the head and deputy head, a teacher psychologist, a speech therapist and two remedial teachers are employed.

Medical and paramedical services are provided and controlled by the Department of Health, Welfare and Pensions.

2.5.3 Education for Indians

A School Psychological Service has been established at the head office and comprises the following personnel:

chief school psychologist

1 principal school psychologist

3 Senior school psychologists - 1 for special education

1 for remedial education

1 for guidance and consultation

(These persons are responsible for planning, administration, co-ordination and inspection.)

At primary schools there are teachers for special education in special education classes and remedial teachers. Where the number of pupils does not justify a trained remedial teacher, remedial assistance is provided by a travelling member of staff.

Both primary and secondary schools avail themselves of the services of a guidance teacher, while most secondary schools have a guidance counsellor. In addition to the head, deputy head and teachers, schools of industry also have teacher psychologists.

The section for Indian Education has three clinics with a senior school psychologist, school psychologists and assistant school psychologists. They give guidance, visit schools, test, co-ordinate and deal with referrals, provide therapy and do consultations.

As far as medical and paramedical services are concerned, the Department of Health, Welfare and Pensions provides the services of the following on a travelling basis:

- School medical officer
- School nurse
- Social worker
- District surgeon
- Oculist
- Dentist
- Eye clinic
- Psychiatrist

2.5.4 Education for Blacks

The Department of Education and Training's Section for Psychological Services has the following staff at the head office:

Chief inspector (psychological services):	1 post
Educational planner (psychological services):	1 post
Senior assistant educational planner :	2 posts
Assistant educational planner :	3 posts

There are no posts for guidance teachers at schools for Blacks and education for scholastically impaired children is still in the planning stage. In the existing schools for special education, five teacher psychologists and a physiotherapist are employed. There are no posts for occupational therapists.

A regional educational planner is in charge of each of the seven regional offices. These regional offices are subdivided into 53 circuit offices each with a circuit inspector of education in charge. There are also four inspectors of schools attached to each circuit office, one of whom is responsible for the psychological services of the circuit concerned.

At present this department does not provide any medical or paramedical services at schools, and the services that do in fact exist are rendered by the Department of Health, Welfare and Pensions.

2.5.5 Professional personnel outside the context of formal education

The Department of Health, Welfare and Pensions has a section for Genetic Services comprising the following persons inter alia: an assistant head (cytogenetics), chief professional officer (erogenetics) nursing organizer, nursing officer and training officers. Several genetic nurses render assistance, and genetic counselling services are available at most of the large training hospitals in the RSA. Assistance and guidance for parents in this sphere is a multidagnostic matter and can only be provided properly if the services of a geneticist, genetic nurse, family doctor, gynaecologist, physician, psychiatrist, dietician, social worker, etc., are available.

Health Services are rendered by several professional members of staff, such as the personnel attached to pediatric clinics, health clinics, child psychiatry clinics and family planning clinics.

The welfare sector, the private sector and tertiary educational sector also render specific professional services, for example the child guidance clinics at universities.

2.6 THE CONTRIBUTION OF THE PRIVATE SECTOR TO PROVISION OF EDUCATION FOR HANDICAPPED AND IMPAIRED PUPILS

The need for facilities in the private sector for remedial education for White children dates back to approximately 1960 when a private afternoon clinic manned by occupational and speech therapists was started in Johannesburg. By 1969 the few part-time private clinics were inundated with enquiries for full-time assistance in this sector. As a result of this two private schools were registered, namely the Freda Muller School (formerly the Norwood Remedial School) and Crossroads Remedial School. Both of these schools are registered as private schools since the government does not as yet make provision for the registration of remedial schools. Funds for the upkeep of both schools are provided through private donations and by parents.

To obtain some idea of the nature and extent of the remedial assistance provided in the private sector, questionnaires were sent to the following organizations and bodies:

Private schools for White, Black, Coloured and Indian children	480
Private schools for remedial education for Whites	<u>20</u>
Total	500
Individuals in private practice	
therapists	100
teachers	80
occupational therapists	180
speech therapists	90
psychometricians	70
clinical psychologists	<u>330</u>
Total	850

The main findings of this investigation are as follows:

- Only a few private schools offer remedial educational programmes.
- The programmes that are in fact offered are extremely limited
- Existing schools for remedial education offer their own unique services in the form of examinations and remediation, although these are limited by the following factors:
 - a shortage of funds;
 - extremely high fees that the parents cannot afford;
 - no uniform qualifications among staff, and
 - according to reports, not sufficient support from the government
- Individuals in private practice in all fields applicable to remedial education, render a wide variety of remedial services, but this does not satisfy the demand.
- Ineffective control of private practices by the statutory bodies is a serious shortcoming.
- Unco-ordinated services rendered by the State and the private sector

Extremely limited services rendered by private schools, schools for remedial education and individuals in private practice exist for Non-White children, while for Black children there are no facilities at all.

2.7 SYNOPSIS

This chapter surveys the present provision of education for children with special educational needs in the RSA. The aim here was to give the reader some insight into the nature and extent of the services available and the personnel involved. Although this chapter does not provide a critical evaluation of the existing provision of education, certain shortcomings are evident in the contents. These shortcomings will be discussed in more detail further on.

CHAPTER 3

CONSTITUENTS OF A SYSTEM FOR PROVISION OF EDUCATION FOR CHILDREN WITH SPECIAL EDUCATIONAL NEEDS

3.1 RATIONALE FOR THE ESTABLISHMENT OF A SYSTEM FOR PROVISION OF EDUCATION FOR CHILDREN WITH SPECIAL EDUCATIONAL NEEDS

3.1.1 The meaning of a system for provision of education

An educational system (like any other system) can be defined as a totality of systematically arranged subsystems whose primary aim it is to execute and control all education and whose secondary aim is to realize the goals envisaged for education in society. Seen in this light, mainstream as well as special education and all other education that takes place outside the mainstream form part of the total system for the provision of education.

The following subsystems can be distinguished in a system for provision of education:

- . a subsystem for education management (which includes organization and administration);
- . a subsystem that embraces the educational structure for the different educational possibilities created;
- . a subsystem that embraces physical facilities, and
- . a subsystem that embraces supplementary and auxiliary services (a school guidance service, clinics, medical services, research bureaux, etc.).

The rationale for a system for provision of education for children with special educational needs can be worked out and illustrated on the basis of the development of systems for the provision of education.

3.1.2 The development of systems for the provision of education and the situation in the RSA

A study of the development of systems for the provision of education demonstrates that changes in the structure of society from a traditional to a modern technological society give rise to problems within the context of education, problems that can be solved only if education is institutionalized. One should also bear in mind that education is instrumental in the changes that take place in society. The institutionalization that has had to take place has been coupled with greater government involvement and the State has taken on education, inter alia, as its responsibility. This also has implications for a diversity of social problems and problems involving the youth.

Greater strides in technology have made society so complicated and differentiated that the system for provision of education has become increasingly more sophisticated. A direct result of this has been that within the system for provision of education the ever increasing demand for preparing pupils for this complex reality has had to be satisfied on the one hand, and it has become necessary on the other to create a system for the provision of special education to accommodate those pupils with special educational needs.

Against this background it also stands to reason that in a country like South Africa with its heterogeneous social components, heterogeneity in the provision of education (also in respect of children with special educational needs) will be apparent. The fairly confusing picture that has been sketched in the previous chapter in respect of the provision of education for children with special educational needs is in fact understandable but necessitates important additions and adjustments in many respects.

It stands to reason that a great variety of factors have to be taken into consideration, these factors playing a part in the establishment of an education system geared to accommodating scholastically impaired, handicapped and highly gifted pupils. In this regard the activities of the WCECSEN include in a certain sense the same problems facing the investigation into education as a whole. It was therefore necessary in many issues to curtail and schematize the problem field. This was especially true of the problems discussed in this chapter.

It is assumed that the main facets that apply in a system for provision of education for children with special educational needs revolve around -

- (i) the categories of children with special educational needs that have to be accommodated;
- (ii) the educational and other professional staff and infrastructure required to satisfy these special educational needs, and
- (iii) the way in which these needs are satisfied from an administrative and organizational point of view. This outlines the structure of this chapter.

By way of introduction, in contrast to the previous chapter, this chapter does not describe the status quo, but the component of provision of education for children with special educational needs that is desired will be brought more strongly into the picture.

3.2 CATEGORIES OF CHILDREN WHO HAVE TO BE ACCOMMODATED

3.2.1 The incidence of children with special educational needs: the present and future challenge

3.2.1.1 Van Niekerk, Bezuidenhout and Hamman (1981) have conducted an investigation into the incidence of handicapped pupils and have made projections of these figures. They concentrated only on the aurally handicapped, visually handicapped, physically handicapped, cerebral palsied, epileptics, pupils with specific learning impairments, autistic and mentally retarded pupils and pupils attached to schools of industry and reform schools, in other words only the broader categories of pupils and not the finely differentiated groups as distinguished in Paragraph 1.2.1.

Attempts were made to establish the incidence of handicapped pupils. These figures are in fact available for certain countries in Western Europe but are indicated per thousand of the population and it is not possible to adapt this figure to per thousand of the school population. In addition it is extremely risky to simply accept these figures for

heterogeneous population such as that of South Africa. It is a known fact for example that the incidence rate for certain handicaps within the different groups themselves exists among the different population groups in respect of all the handicaps. Unfortunately registration at the different national councils for the handicapped is not compulsory and reliable figures can therefore not be calculated.

If education is to be planned effectively it is essential however that projections of expected numbers of pupils should be made. Because figures are not available or are unreliable, other methods have to be used to make projections.

As the basis for projections of handicapped pupils, the number of pupils at the schools for special education of the DNE are expressed per thousand of the ordinary White school population. Obviously this is not a very satisfactory method because the figures obtained in this way are affected to a great extent by the available accommodation in schools for special education. Experience has shown that as soon as a new school is built there is usually an influx of pupils from the ordinary school to the special school. In the case of old established schools such as those for the aurally handicapped, the needs of these pupils are satisfied to a reasonable extent. However, in the case of new additions to the list of special provision of education for the handicapped, such as pupils with specific learning impairments (Group C), a considerable rise in the number of pupils is expected and the projections obtained are by implication far too conservative.

Despite the above-mentioned shortcomings of the method of expressing the number of handicapped pupils per thousand of the school population on the basis of the actual figures for White school-going pupils, this is obviously the only yardstick/criterion that can be accepted at present until such time as figures for the different handicaps as well as the different population groups can be determined.

Two projections were made to determine the expected number of White pupils up to the year 2020. First, the number of pupils at schools for special education in 1980 were expressed per thousand of the

expected number of White pupils at the ordinary schools of the provincial education departments. The second projection was based on the trend manifest in the projected decrease or increase of pupils over a number of years. In the case of certain kinds of handicapped pupils, the data were available over a fairly short period which meant that the projections had to be handled with the utmost caution.

Since generally speaking there is a great backlog in respect of the availability of facilities for all kinds of handicapped pupils in Asian, Coloured and Black education, here the same method of projection that was applied for the Whites could not justifiably be applied throughout. For the purposes of this report and because an effort is being made to achieve parity with regard to facilities for education, etc., the same figure per thousand of the school population that applied for the Whites in 1980 was also applied to the other population groups. Of course it is assumed that the figure will remain constant up to the year 2020. The second method to determine the projection of the number of handicapped pupils over a number of years which was used for the Whites was however not applied here because of the backlog in the education of the other population groups regarding schools and accommodation for handicapped pupils.

Bearing in mind that environmental deprivation occurs less among Whites than the other population groups, one must assume that the projection based on the incidence rates for Whites will be an underestimation of the incidence rate for the other population groups. It is a known fact that the so-called poverty spiral (Garbers, 1980, p.52) is coupled with inter alia, poorer medical treatment of children, poorer health and nourishment of the mother during pregnancy, increased infant mortality, etc., so that one can expect that relative socio-economic deprivation will also go hand in hand with an increase in the incidence of other impairments. It is logical therefore that the projections which are based on somewhat scanty data should be regarded solely as an indication or trend, and more likely than not are or will be an underestimation of the real state of affairs. The projections will therefore have to be revised periodically in the light of changing circumstances and on the basis of better grounded

basic data.

Although no distinction was made between boys and girls in the projected number of pupils, it is an interesting and well-known fact that generally speaking there are more handicapped boys than girls. In addition, more boys than girls experience learning problems and are referred to child guidance clinics. Basically this phenomenon stems from some very interesting aspects concerning interpersonal relationships.

TABEL 3.1 ESTIMATE OF THE EXPECTED NUMBER OF HANDICAPPED PUPILS BY THE YEAR 2020 DEDUCED FROM THE INCIDENCE RATE AMONG WHITES

Impairment	Incidence rate per thousand of the school population	Number of handicapped pupils			
		Asians	Whites	Coloureds	Blacks
The aurally handicapped	1,135	237	850	773	8 356
The visually handicapped	0,532	96	417	362	3 916
The blind	0,182		136		
The weak sighted	0,375		281		
The physically handicapped	0,737	152	552	498	5 389
The cerebral palsied	1,318	275	987	775	9 713
The epileptic	0,589	123	441	401	4 336
Pupils with specific learning impairments	1,442*	301	1 080	982	10 616
The autistic	0,062	12	46	42	456
The mentally retarded	2,949	616	2 771	2 008	21 710
Pupils at schools of industry and reform schools (juvenile delinquents and serious behaviour deviants)	2,275	465	1 928	1 549 (2 032**)	16 748

* This estimate is probably too low because there are also too few schools, for White pupils with specific learning impairments and many of these children are accommodated in schools for the cerebral palsied.

** In 1977 there was already an incidence rate of 2 983.

If special education according to the existing models (as in operation among the Whites in particular) is to be provided for the above numbers of pupils, by 2020 according to the running costs of 1979/1980 (for the aurally handicapped the units costs are R3 178, for the visually handicapped R2 596, for the physically handicapped R3 268, for the cerebral palsied R3 664, for epileptics R2 845 and for the mentally handicapped R1 552), the annual expenditure will be in the region of R165 million. This does not even include the capital costs for buildings. Bearing in mind the other demand that will be made on the Treasury in respect of provision of education, it is highly improbable to expect the existing standards for the provision of special education to be maintained in the future.

3.2.1.2 According to the Murray report scholastically impaired children (Sonnekus, 1981) are divided into A, B and C groups (see 2.2.1.1).

In the light of the different ways of dealing with these children in the four provinces (here reference is being made to White children), there are virtually no comparable statistics and any figures in the tables in this report should be handled with extreme caution. The following figures which reflect the present and future challenge can be given approximately.

- . The percentage of pupils who receive remedial assistance in individual sessions outside the class context vary from 0,70 % to 3,40 % in the different provinces.
- . The percentage of children who are referred to the Department of National Education by the various education departments, i.e. Group C children, vary from 0,019 % to about 2 %.
- . Of the total school population in the Transvaal 6,97 % receive one or other form of remedial assistance.
- . Of the school population in the Orange Free State 2,56 % receive remedial assistance outside the class context.

- . Of the total school population in Natal 3,4 % were assisted by full-time remedial teachers in 1980.
- . Of the total primary/secondary school population in the Cape Province 0,70 % received remedial assistance from trained remedial teachers on an individual session basis in 1980.
- . A general conclusion that can be drawn in respect of White children under the control of the four provincial education departments is that a fairly small percentage of White pupils with the available teachers and facilities are at present receiving remedial assistance in one form or another. At the same time one should emphasize that all departments report that there are long waiting lists at their various schools and/or clinics and/or Psychological Services, that there is a shortage of funds and facilities and that the demand for remedial assistance cannot be properly satisfied.
- . About 0,77 % of all Indian pupils receive remedial assistance outside the class context.
- . For Coloured children falling under the Department of Coloured Education there are at present fourteen posts for remedial teachers. The number of pupils who receive assistance is not known.
- . It is estimated that about 50 % of Black pupils are scholastically impaired and there is no formal provision for remedial education. A new system of upgrading initial education known as instruction at different levels has been in operation since 1979 and is being expanded annually with a view to all schools being able to receive instruction at different levels before 1982. The system promises good results for Black education although a great deal of work and research will still have to be done in this field.

With regard to the scholastically impaired child, in assessing the present and future challenge one should bear in mind that the extent

of scholastic impairments among pupils is dependent upon a number of factors of which the degree of environmental deprivation and thus by implication a child's orientation towards and support in schooling and learning within the family context as well as the quality of education that he receives, are the most important. The extent of the challenge that has to be faced in respect of remedial assistance for scholastically impaired children is therefore difficult to determine and can vary from school to school and from one education department to another. It is possible that up to 50 % of the pupils could therefore require remedial assistance.

3.2.1.3 With regard to the highly gifted child (Mackay, et al., 1981) one should bear in mind that 2 to 3 % of all pupils can be labelled as highly gifted and that provision of special education for them should be given top priority. On the whole the provision of special education for the highly gifted is something that very few children are exposed to.

It is clear from the above that the challenge which faces us in respect of provision of education for pupils with special educational needs is quite overwhelming. In fact, the challenge is so great that one cannot even think of a solution based on the existing model of special education. Radical alternative solutions will have to be sought - solutions with greater emphasis on mainstream education with a corresponding sharper tapering off of provision for special education.

3.2.2 The environmentally deprived child (Biesheuvel, 1981)

3.2.2.1 By way of introduction it can be said that a great deal of comprehensive literature has appeared on the phenomenon of environmental deprivation. From this literature an extremely clear and differentiated picture has emerged of the environmentally deprived child, his circumstances, the restraints that he experiences in respect of his progress at school, etc. The picture of the environmentally deprived child and his circumstances in respect of formal and formative education that has emerged seems to be universal. As far as South African conditions are concerned, apart from the comprehensive literature available here on the environmentally deprived child and

his education, one can also draw freely from the world literature.

The effect of compensatory education which in its rich diversity has been designed to compensate for the shortcomings in the experiences and formative education of the environmentally deprived child and his resultant lack of defensibility at school, has also been subject to strict testing. A great deal can also be drawn from the results of this diversity of evaluation studies. Against this background it was therefore not necessary to conduct original research but the knowledge and research experience of the committee members could be used as well as the comprehensive literature available.

3.2.2.2 A distinction should be made between the social and cultural circumstances of the environmentally deprived child. The traditional school has derived its particular nature from the system of science which, in the form of science subjects (the result of systematically arranging our world of experience), provides the subject-matter presented to pupils. In this way by means of scientific knowledge pupils also learn how to get an intellectual grasp on their world of experience. The system of science forms at the same time the condition for technological development. At present there are no alternatives other than the system of science for general technological development and the development of societies.

Certain cultures (such as the Western technological set-up) expose their children to a greater extent than other cultures to technological culture, intellectually arranged thought, implicit scientific methods of thought and approach, techniques of thought and categories of experience, etc. which give these children a head start in the learning tasks with which they are confronted at school. In addition, the style of education in these cultures is such that the educator-child relationship is of such a nature that the child has to be guided individually and by an adult. This does not imply that those cultures in which suchlike experiences are not presented are inferior, but simply that children from a non-technological culture require special assistance in their school learning to a greater extent. Obviously there are also subcultural groups in the technological society which likewise do not provide school-supported experiences

and child-rearing and that the children from these subcultures and social circumstances also merit special assistance and consideration.

Against this background it was decided not to recommend that individual provision for education be made for socially and culturally deprived children. The solution should rather be sought in providing education of a high standard aimed at the needs of individual pupils, the style of learning of environmentally deprived pupils (which makes an inductive style of teaching the obvious) one the specific backlogs of individuals or groups of pupils, etc. What it boils down to is that not so much the child but the school should be able (by the provision of special staff, inter alia) to allow education to cater for the needs of pupils in the best possible way.

3.2.2.3 With regard to the methods of intervention on behalf of the environmentally deprived child, a large variety of strategies have already been applied and evaluated. On the whole the results of these evaluation studies have been somewhat disappointing. Thus a clear picture of the proper strategies of intervention has not yet emerged from all the research undertaken. Generally speaking there is a strong belief in the implementation of compensatory intervention as early as possible in the child's life on the one hand and in aiming intervention not only at the child himself but also at his total life and upbringing situation on the other. In addition, intervention in the adolescent phase by emphasizing the placement of adolescents in hostels (to cater for their striving for emancipation), presentation of strict formal-cognitive compensatory and remedial programmes and intensive counselling have been successful, especially in Israel (Smilansky and Nevo, 1979).

To tie up with the above trends in the South African context a solution should be sought in preparing children for school in the pre-school phase, accurately identifying the needs of and the areas in which the environmentally deprived child is behind, designing compensatory innovations involving the family environment, designing career-oriented curricula, presenting education according to an inductive didactic strategy and purposeful guidance especially in the

secondary school phase.

The special care required by the environmentally deprived pupil necessitates that all teachers should be oriented in their training towards the environmentally deprived child and his educational needs. The educationist (compensatory education) is the professional member of staff par excellence who should specialize in identifying and guiding a programme design for the environmentally deprived child and in guiding the parents of the environmentally deprived pupil.

3.2.3 The scholastically impaired child

3.2.3.1 Definition and identification

To obtain a clear picture of the scholastically impaired child it is necessary to make a distinction between a scholastically impaired child and the handicapped child. The latter is someone who is burdened with aggravating circumstances and there is an indicative deficiency in respect of his potential, for example deafness, blindness, epilepsy or a specifiable shortcoming in his rearing. Poor domestic circumstances for example can be regarded as a specific scholastic handicap and one can in fact say that here the child is handicapped in both his learning and his development (see Paragraph 3.2.4).

In contrast to the scholastically handicapped child the scholastically impaired child is a pupil whose achievement is not what it should be in the light of his achievement potential, i.e. according to his ability - his intelligence, sensory abilities, etc. A child who underachieves therefore is known as a scholastically impaired child. A handicapped child is almost always scholastically impaired.

The causes of scholastic impairment are divergent and whether they are regarded as isolated or as a group they form part of an upbringing problem which is the very root of scholastic impairment. All causes irrespective of their nature should be seen in the context of the education and upbringing of the pupil concerned.

Scholastic impairment however indicates a situation that can be rectified,

whereas in the case of a handicap the possibility of cure is extremely slight. It is precisely here that the justification lies for assisting the scholastically impaired child as presently in practice, namely remedial help. It is because of the possibility of cure by remedial treatment (over a longer or shorter period) that the scholastically impaired child should as far as possible be kept within mainstream education. In addition, the handicapped child's scholastic impairment can also to a greater or lesser extent be cured even if this does take place within special education.

The care of scholastic impairment is therefore an educational situation which in some or other way has become a problem for both the child and the teacher. A diversity of factors are at the root of the problem and the child manifests his problem in symptoms that find expression in all sorts of inversions: confusing letters; making mistakes in respect of the rules for doubling vowels and consonants; spelling phonetically; omitting letters from words or omitting complete words, phrases or even sentences; inserting letters in words; making grammatical errors; improving and interchanging the sequence of words, and making a variety of arithmetical mistakes, etc. The following learning problems also stem from the above:

- . affective or emotional lability, and
- . an inability to concentrate, perceive, think and memorize.

Of course any strategy designed to assist a scholastically impaired child will fail unless the root of the child's problem which forms the basis of the symptom is explained clearly and in full.

3.2.3.2 The aims in assisting the scholastically impaired child

In the light of the above the aims for a satisfactory education practice for the scholastically impaired child will have to include the following:

- (1) Remedying the problematic (unharmonious) educational situation in which the child finds himself

This does not involve the application of special devices or recipes but rather penetrating to the core of the child's problem which means the application of ordinary but also specialized didactic and pedagogic measures.

(2) Rectifying certain shortcomings which hinder the child in the learning process

Affective lability and cognitively poor ordering on the part of the child must be overcome. This means that the child must be supported in his total learning process.

(3) Preparing a child for learning

This aspect is most relevant at pre-school level where the child is prepared for his entry into school, but also in the first year of school and later on in every standard of primary and secondary school. Preparing a child for learning is therefore an all-embracing aim that is applicable at any stage of the child's development. The implementation of this aim will differ from phase to phase and specialized didactic measures will have to be designed for each particular child at a particular stage and also in a particular situation. Programmes for preparing children for learning are one example of an effort to realize the goal.

(4) Relieving the symptoms of learning problems

This requires special orthodidactic measures and remedial techniques.

Experience has shown that a number of symptoms will disappear if the goals that were set earlier are realized. A number of these symptoms will continue however, and this is the field for further didactic research and implementation.

Relieving the so-called symptoms is a practice that leaves much to be desired. An effort should rather be made to penetrate to and rectify the underlying causes responsible for a particular symptom, for example the causes underlying the misreading of words, inversions, etc.

3.2.3.3 Criteria for identifying the scholastically impaired child

The important point is how can we identify the scholastically impaired child? In this regard a hierarchy of criteria which applies to different levels of identification is put forward:

(1) Criteria that can be applied by the ordinary class teacher to identify the scholastically-impaired child in primary school:

- . inadequate scholastic achievement or underachievement;
- . problems experienced by the pupil in respect of learning in specific ways;
- . non-learning readiness;
- . the circumstances and prehistory of the child which contribute to his learning circumstances and problems;
- . backwardness in language development and acquisition;
- . phenomena such as: restlessness, overactivity; petulance; distraction of attention; daydreaming; asociality, tearfulness, poor visual and acoustic discrimination, poor visual and acoustic memory, impulsiveness and lability in his/her emotional moods
- . specific learning problems, for example: inability to distinguish foreground and background; reading and writing problems; perceptual problems; laterality problems; problems with eye-hand co-ordination and movements; hesitation or uncertainty in respect of movements; problems relating to the succession or sequence of matters or events; reading and spelling problems and elementary mathematical problems.

The ordinary class teacher should on the basis of the above criteria be able to tentatively identify or recognize a potential scholastically impaired child. This is the least that his training and experience should equip him for. Detailed and specialized diagnosis can follow and be implemented where and when necessary by specially trained persons.

(2) Criteria for application by the remedial teacher

The remedial teacher is expected to have an in-depth understanding of the problems of the scholastically impaired child. He will therefore have at his disposal highly specialized apparatus for identifying and assisting these children.

The remedial teacher can use the same criteria mentioned above, the

difference being that he should be more geared to a specialized level of diagnosis and assistance or remedial treatment. The remedial teacher should therefore be attuned to a situation analysis of the particular scholastically impaired child and be able to do an in-depth evaluation of his/her specific educational situation.

3) Criteria for application in the secondary school:

The scholastically impaired secondary school pupil requires stronger subject oriented orthodidactic identification assistance. The criteria for identification at this level will have to be applied by a skilled professional member of staff. The specific criteria used for identification by these persons should be directed towards assisting subject teachers in dealing with a scholastically impaired child in the secondary school. The particular identification of and rendering of assistance to or remedial treatment for children of this kind will have to be or become the task of the subject teacher who has a good grounding in the particular subject. Here there is no question of employing a remedial teacher with general training. Someone with orthopedagogic and/or orthodidactic training should however assist the subject teacher with skilled advice. In addition one should bear in mind that learning problems experienced by a child in primary school often lead to a poor self-image poor motivation and a poor general level of achievement in the secondary school phase. In addition to, but often in the place of remedial assistance that has to be provided for a specific subject or for learning in general, the secondary school pupil requires subject guidance or even predominantly general guidance.

(4) Criteria at the level of expert or specialized staff in the Psychological and Guidance Services and/or school clinics of the education departments

In spite of the hierarchy of criteria put forward in the previous paragraphs, it is to be expected that there will still be scholastically impaired pupils who at the above levels are not properly identified or diagnosed or do not receive assistance. Consequently there will be a flow of these pupils - always on the recommendation of the teaching and other staff at schools, as well as parents - to a more expert or specialized level. At present this level is known as the Psychological or Guidance Services.

At this highly specialized level there is a skilled professional multidisciplinary team of experts who conduct an in-depth diagnosis and evaluation of scholastically impaired pupils in their educational situation so as to give them the necessary assistance, advice, and guidance. A team of this kind comprises pedagogues, psychologists, social workers and a spectrum of medical and paramedical staff. The team is a multidisciplinary one because the problems involved here are so divergent and complicated.

No fixed criteria can be laid down for diagnosis, evaluation and rendering assistance because of the divergence of the problems that this multidisciplinary team has to deal with.

It is imperative that the findings of the multidisciplinary team should be integrated in such a way that they will be able improve the pupil's educational situation. All data on identification, diagnosis, evaluation and remedial assistance should therefore be integrated by someone who has a good grounding in the unharmonious dynamics of education to enable the child to make the most of his schooling.

3.2.3.4 Particular hiatuses in the assistance rendered to the scholastically impaired child

In the light of the following hiatuses the matter of the specific needs of the scholastically impaired child and the assistance that he requires will be discussed further on. The investigation has brought to light the following hiatuses in the present set-up of remedial education.

(1) The class teacher is not in a position to render assistance to a scholastically impaired pupil on an individual basis for the following reasons -

- . she is not properly trained to identify, evaluate and assist pupils;
- . she does not know enough about preparing pupils for school;
- . she cannot individualize in her daily teaching because the classes are too big and the syllabuses are overloaded and because the very nature of her training does not permit this;
- . she regards pupil's achievements too much in terms of a criterion for promotion and not a criterion for evaluation, and
- . she is not sufficiently attuned to preventing learning problems

) The shortage of remedial teachers

There is an urgent need for a post for a remedial teacher at every primary school. The following aspects are important here:

- . Not enough attention is paid to the component of preparing pupils for learning in a remedial programme, and remedial education

- concentrates too much on the perceptual aspect of learning.
- With regard to the Group B pupil, the most urgent need is also for better provision of education. There are too few auxiliary classes and the introduction of a junior and senior auxiliary class would be the ideal situation. The existing intensive remedial classes in certain provinces are also not enough to help all those pupils requiring this form of assistance. There is also an urgent need for many more full-time remedial classes to be given for Black and Coloured pupils.
- In no other field is there such an urgent need for and a lack of co-ordination in respect of rendering assistance as in the case of the scholastically impaired child. A uniform system in terms of auxiliary classes and remedial teachers is proposed.
- There is an urgent need for orthodidactic assistance and staff. Educationists (orthodidactics) find it impossible to pay the necessary attention to compiling auxiliary programmes, holding consultations with and providing the necessary guidance for remedial teachers and class teachers, etc.
- A multidisciplinary approach is seldom used as it should be. One real danger is a fragmentary or one-sided approach to the problem without real co-ordination and integration of insights.
- The scholastically impaired child therefore requires assistance at two levels. Firstly he needs to be prepared for learning (here the affective and cognitive sides, perceptual and language problems and the possibility of interdisciplinary connections will have to be looked at) and secondly he/she requires remedial assistance. The latter concerns the designing of remedial reading and mathematic programmes in particular.

3.2.3.5 Implications for the education system

As far as the educational structure is concerned, that is the structure that makes provision for the flow/movement of pupils through the different school levels and types of schools, the most important implication for the education system of the above discussion is the need for facilities for providing assistance to the scholastically

impaired child. Reference is made here in particular to the introduction of auxiliary classes with the necessary staff or the possibility of providing remedial assistance to groups of pupils. The training of teachers to initially identify and assist pupils and the establishment of remedial teaching posts at primary schools and guidance posts at secondary schools are also part and parcel of this matter.

The above ties up with the institution of Psychological and Guidance Services and the appropriate manning of these so as to satisfy the above needs. It stands to reason that the system should have a built-in mechanism whereby pupils can move between the school and the Psychological and Guidance Services and whereby pupils can eventually be referred to parallel streams of education should their needs require this.

As far as the control and organizational structure is concerned, it is clear that the infrastructure that is created for assisting scholastically impaired children should form an integral part of the educational infrastructure as a whole. It should also be part and parcel of the provision of mainstream education.

Bearing in mind the great backlog being experienced by scholastically impaired Black and Coloured pupils in particular, the above has special implications in terms of finance. A strategy will have to be designed and a special effort made to provide services of the same standard for all population groups in respect of remedial assistance.

3.2.4 The handicapped child (Prof. G. Stander, 1981)

3.2.4.1 Scope and identification

Reference was made to the handicapped child at the beginning of Paragraph 3.2.3, the aim being to explain the problems of the scholastically impaired more clearly.

The following points supplement what has already been said:

A handicapped pupil is a pupil whose handicap requires special education (including remedial education). Although the process of becoming an adult and learning for the handicapped child does not differ essentially from

that of the normal child, because of restricting circumstances imposed by his impairments, the handicapped child is dependent upon special education. The seriousness of these children's handicaps will differ from case to case which means that the child's position on the continuum will determine the kind of education that he will receive.

A distinction is made between primary and secondary handicap. These are concepts used to determine in which school a child should be placed. The emphasis is therefore placed on the child's needs in special education and on the basis of this a decision is made as to where he can best be helped. This depends on the facilities that a school has for dealing with the child's handicap. The other handicaps that this child experiences are regarded as secondary handicaps. Secondary handicaps and/or problems and complications, typical of the handicapped pupil, include the following:

- . emotional tension and adaptation problems
- . problems in respect of self-acceptance
- . scholastic problems
- . frustration because of restriction of his world of experience
- . behaviour deviations
- . poor self-image
- . overcompensation
- . evasion of threatening situations
- . negativism
- . low frustration tolerance

Many of these handicaps can be traced back to genetic factors which are indicative of hereditary defects. This means by implication that it is essential to identify and brief high-risk parents and children in time with regard to their genetic disposition in order to prevent hereditary defects of this kind.

The Educational Services Act (No 41 of 1967) defines a handicapped child as follows: "'handicapped child' means a child belonging to a category of children referred to in Schedule 1 and who, except in the case of a child referred to in Section 37, is under the age of 18 years, and who, in the opinion of the Secretary, deviates to such an extent from the majority of

children in body, mind or behaviour that he -

- (a) cannot derive sufficient benefit from the instruction normally provided in the ordinary course of education;
- (b) requires education of a special nature to facilitate his adaptation to the community; and
- (c) should not attend an ordinary class in an ordinary school because such attendance may be harmful to himself or to other pupils in that class;

but is nevertheless educable and will derive sufficient benefit from education referred to in paragraph (b)".

The categories of children referred to in Appendix 1 are the following:

- deaf children
- hard-of-hearing children
- blind children
- partially sighted children
- epileptic children
- cerebral palsied children
- physically handicapped children

children suffering from a defect and who have been designated by the Minister (in consultation with the Administrator) as handicapped children for whom provision should be made in this act.

The Education and Training Act (No 90 of 1979) comprises a similar definition of the handicapped child but there is no reference to specific categories of children. In the Coloured Persons Education Act (No. 67 of 1963) and the Indians Education Act (No. 61 of 1965) reference is made in a similar way to "handicapped children" and the special education meant for them. In the two last-mentioned Acts there is also no mention of categories.

A useful classification of the categories of pupils who qualify for special education, although this does not necessarily mean that there is a plea for schools in every category, is the following (Stander, 1981):

Auditory handicap

This category includes the deaf child, the hard-of-hearing child and those with partial hearing. A deaf child usually has a hearing loss of more than 65 db in the speech sound frequencies of 500 to 4 000 HZ, when measured with a pure tone audiometer. The hard-of-hearing child's hearing loss is such that he cannot make proper headway in ordinary education without extra help. A child with partial hearing on the other hand can, in spite of a slight hearing loss, receive his education in ordinary classes at ordinary schools without suffering detrimental results of any kind.

Visual handicap

The term, visual handicap involves the following three categories of children:

- (1) the blind child whose visual defect is such that he cannot be taught through a visual medium and is therefore dependent mainly on braille and other tactile media for his instruction;
- (2) the partially sighted child whose best eye after correction is not poorer than 6/60 and not better than 6/24 according to the Snellen test but can still be taught through the visual medium, and
- (3) the deaf-blind child who is both aurally and visually handicapped and cannot be taught according to the customary methods of instruction used solely for the deaf or solely for the blind.

Physical handicap

These children show a chronic disturbed function or chronic deviations (congenital or acquired) of any of the systems of the body.

Mental retardation

This handicap indicates a primary intellectual deficiency and in terms of intellectual ability means an IQ of 80 and less. The scholastically educable child is a mentally handicapped pupil who is regarded as scholastically educable if his IQ lies somewhere between 50 and 80 and there are clear signs that he will not progress properly

in ordinary education. The seriously mentally handicapped child is ineducable but trainable and has an IQ of between 25 and 50. He is therefore exempt from compulsory schooling and is referred to government, government assisted and private training centres. The severely mentally handicapped child has a IQ of less than 25 and is untrainable and dependent on care. This child's intellectual ability is so limited that he will never make any worthwhile progress in learning.

Neurological handicap

A neurological handicap indicates a deviation, a partial disturbance, an impediment, abnormal working of or damage to the central nervous system. This category includes the cerebral palsied child whose main defect is not a mental handicap but is usually a motor defect. The epileptic child is also included here, as his progress at school is impaired by epileptic seizures (activities).

Children with specific learning disabilities the so-called Group C pupils are also included here.

The aphasic child

This child as a result of a brain dysfunction manifests a significant deficiency in the processing of auditory language. The result is partial (dysphasia) or total (aphasia) inability to put his thoughts into speech or to understand the spoken or written word.

Early childhood autism

This child's conspicuous otherness shows a clinically identifiable syndrome or behaviour pattern of malfunctioning which starts before the age of three and is characterized inter alia by

- . introverted and detached behaviour
- . total and sustained disturbance in his emotional relations with people;
- . apparent serious mental impairment;
- . a language disturbance;
- . anxiety to maintain uniformity in his environment; and
- . avoidance of visual or other sensory contact with his fellow beings.

Pedagogically neglected and special care children

Pedagogical neglect in a child is usually the result of unfavourable social and domestic circumstances. Misaligned upbringing leads to deficiencies in the child's affective and normative upbringing. This neglect results in serious scholastic retardation and failure, defective intellectual, personality and character development and a disturbed emotional make-up. A special care child is one who has no one to care for him or whose natural nurturers have deserted him or do not look after him properly and because of his pedagogical neglect, in terms of the Children's Act, he is committed to a school of industry or a children's home.

Juvenile delinquent

In conjunction with the above, a juvenile delinquent is someone who, as a result of his pedagogic neglect and consequent defective normative development and misconduct, is committed to a reform school according to law. Compared with the pupil at a school of industry, the juvenile delinquent is a more hardened youth but one who it is believed can benefit from educational assistance.

The emotionally/behaviour deviant child

This child manifests emotional maladjustments and behaviour deviations which impede his learning progress at school and his integration into school and the community. He is therefore dependent upon therapeutically oriented education. Clinically speaking however, this child has no serious psychotic or organic disturbances.

The psychologically seriously disturbed child

This child, depending on the specific stage of development that he is going through, shows a serious psychiatric or clinic psychological syndrome of behaviour disturbance, personality disturbance, psychosomatic disorder, neurosis or psychosis.

We must stress once again that the above brief exposition of the categories of children included in special education is unavoidably cursory. The reader is referred to the report of the subcommittee concerned for a more detailed discussion. In this regard the following few remarks are of particular importance:

- The description provided in each case indicates that early and effective identification (diagnosis) are always essential and that various categories of professional personnel should also be included in the identification.
- Rendering assistance to and providing education for these pupils is a specialized task and differs from one category to another.
- Although an infrastructure for identification is being used at present it is not functioning effectively as yet especially insofar as it affects provision of education for handicapped Black and Coloured pupils.

3.2.4.2 Implications for the educational system

The present dispensation of provision of education for handicapped pupils in the RSA has several far-reaching implications for the educational system. On the level of the control and organizational structure there is a system of divided control in that seven education authorities assume the responsibility for provision of education for handicapped pupils, all with different policies in respect of a fundamental matter such as the educational structure.

Another noticeable feature of the educational structure is that integration in mainstream education figures more prominently among the Coloured, Indian and Black education authorities, probably because all pre-tertiary education for these population groups is handled by one education authority and because the infrastructure for special education is poorly developed. In the case of the Whites however, there are the provincial education authorities on the one hand, who for the most part control mainstream education but also make provision for special education (mentally handicapped pupils and in the case of two provinces, children with partial hearing) and the Department of National Education on the other that provides education for the vast majority of handicapped pupils.

It is this question of divided control in particular that leads to large scale differences in the financial and supporting structures. Within White education there are differences in approach in respect of auxiliary and professional personnel and the provision of auxiliary services in general

on the one hand and disparity in financial allocations to the different education authorities for the creation of educational facilities for the handicapped on the other.

It is obvious that all the above aspects should be included in the proposals for a new system for provision of education for the RSA in which justice should also be done to the handicapped child. More about this in the next two chapters.

3.2.5 The highly gifted pupil

For the purpose of clarity we must once again stress our support of Haasbroek and Jooste's recommendation (1981) with regard to the definition of the highly gifted pupil, namely that giftedness is used as an all-embracing concept to include all forms of exceptionally high or outstanding achievement on the part of pupils. Pupils who perform extremely well in all subjects all the time are also qualified as mentally highly gifted pupils. Pupils who perform extremely well in one subject or school activity and a few subjects or school activities or who as a result of a specific personal quality or qualities do extremely well all the time are labelled as specific highly gifted pupils (p.14).

The recommended concept, mentally highly gifted pupil therefore incorporates known concepts such as gifted, highly gifted and mentally (highly) gifted children, while the recommended concept, specific highly gifted pupils includes concepts such as specific gifted and talented children.

The rationale for provision of special education for highly gifted pupils (and therefore also for the early identification of such pupils) is to be found in the following arguments as summarized by Haasbroek and Jooste (pp.16-18):

Highly gifted pupils may be making satisfactory progress from a scholastic point of view within the normal class situation, but this does not mean that they are using their potential to the full. Subject-matter that is a challenge to the abilities of the highly gifted pupil is necessary for the realization of his potential. Shortcomings in this regard could inhibit the development of his abilities and even lead to stagnation.

It is an accepted fact that an education system makes provision for individual differences between pupils through individualization and differentiation. Bearing in mind that within this context special education is provided for handicapped and scholastically impaired pupils, why is no provision made for the highly gifted pupil?

There is no doubt that the special (or even specific) skills and/or abilities of the highly gifted child can be developed by means of special educational programmes or facilities. If one considers the particular contributions that highly gifted people have already made to society then it is only right that provision of special education should be instituted.

Several factors are responsible for the highly gifted pupil losing interest in both intra- and extracurricular activities and possibly ultimately developing a negative self-image with underachievement as one possible result. Provision of special education could help to prevent a concurrence of negative circumstances such as this.

As far as the recognition/identification of highly gifted pupils at pre-primary, primary and secondary schools is concerned, it is clear that the expert knowledge of more than one person is necessary. The proposal that a panel of evaluators should play a role here has many merits and here one can think of the school principal, deputy principal(s), experienced subject teachers, a school guidance officer, educationist in orthodidactics, orthopedagogues, social workers and curriculum experts as persons who could contribute to effective identification, planning of educational programmes and placement of the highly gifted, (Haasbroek and Jooste, 1981, p. 115).

For the sake of completeness it is necessary to refer to a preliminary identification, the aim of which is to recognize all pupils in the school population who could be highly gifted. This process can then be followed by individual identification procedures during which pupils are intensively evaluated to determine whether they are really highly gifted or not. This intensive identification of highly gifted pupils has a number of objectives, namely selecting pupils who are really highly gifted, determining their

educational needs, designing educational programmes and placing these pupils in an educational programme. It is in this intensive identification in particular that the above panel plays a significant part (Haasbroek and Jooste, pp. 116,117).

Criteria that the teacher may apply in identifying potential highly gifted pupils include the following (Haasbroek and Jooste, p.118).

- . A high IQ
- . exceptional ability in Mathematics, the natural sciences and Biology and mechanical subjects
- . exceptional language ability as specific giftedness
- . creative giftedness.
- . exceptional talents in music, art and dancing
- . specific giftedness such as the ability to dramatize, literary ability, leadership qualities and excellent human relations.

With regard to the definition and identification of the highly gifted pupil, something must be said about the highly gifted underachiever and the highly gifted pupil in special education. The former is not easily identified in the above way. Standardized tests usually indicate these pupils as having exceptional ability but who do not perform accordingly at school. Consequently objective standardized tests such as intelligence, aptitude, interest and scholastic achievement tests are for the most part the most obvious methods of identification when a teacher suspects that a pupil is a highly gifted underachiever.

The highly gifted pupil in special education runs the risk of being ignored because giftedness is seldom related to pupils in special education. This phenomenon should possibly be regarded as one of the disadvantages of a system of separate provision of education for handicapped pupils. The point is however that separate provision of education for handicapped pupils is regarded as being independent of the mental ability of the handicapped child (the exception here is the mentally handicapped child) Consequently there are also deaf, hard-of-hearing, blind, physically handicapped or cerebral palsied pupils (to use a few of the categories as examples) who can also be highly gifted. They should therefore also receive attention as referred to above.

The existing provision of education for the highly gifted and the shortcomings involved are well known and it is not necessary to go into detail here. The reader is referred to the work of Haasbroek and Jooste (pp.1 and 2) and MacKay and collaborators (pp. 2-8) referred to above.

The main point is that highly gifted pupils have educational needs which are different from those of the majority of mainstream pupils and it is imperative therefore that ways and means be found to realize their particular abilities. In this regard the existing provisions referred to above, which include differentiated education with all its ramifications should be supplemented with differentiated individualized or enriched educational programmes designed for a specific highly gifted child. Not only should programmes of this kind be designed but they should also be supplemented and preceded by the necessary and appropriate research. Furthermore, attention should be paid to the provision of special facilities, extracurricular or otherwise to implement the programmes. If one bears in mind that initial identification (including the highly gifted underachiever) will be the main task of the class teacher and that the panel referred to above will comprise mainly experts in education, teacher training will have to be considered with a view to specialization in this field.

3.3 EDUCATIONAL AND OTHER PROFESSIONAL PERSONNEL INVOLVED

The second constituent that comes to the fore in the rationale for provision of education for children with special educational needs is the personnel concerned. The aim here is to point to (in less detail than in Paragraph 3.2) specific matters which in this context allow provision of education to come to the fore as an extraordinary matter and to let the spotlight fall on the personnel concerned.

In addition to the child with specific educational needs there is also the staff who must guide him. With regard to the scholastically impaired child, reference has been made to the ordinary teacher, the remedial teacher at primary school level and other specialists such as the school guidance teacher, the specialist in the field of orthodidactics, etc., at secondary school level, who play a part in the identification of and rendering of assistance to the scholastically impaired child. Mention has also been made of the particular need for special and supplementary training for

most of the staff involved and the particular hiatuses existing in this regard in certain education departments.

Still within the mainstream of education but on the other side of the spectrum are the problems surrounding highly gifted pupils, certain aspects of which were referred to in Paragraph 3.2.5. In this paragraph the involvement of teachers in the identification of pupils (both in the preliminary and the intensive identification programme) was stressed and the point was made that further or supplementary training will have to be looked at. Two points can be added to what was said in this paragraph, namely: this training also applies to teachers who enter special education and also has a bearing on the question of coping with the highly gifted child in the classroom.

In the recognition/identification and rendering of assistance to the handicapped child there is however room for the involvement of a team of specialists from education, medicine, social work, psychology and other related field. Although the individual role of each specialist in this regard will probably have to be defined more clearly and be more strongly motivated, the following are some of the most obvious problems that have come to the fore in this investigation:

- . The inadequate way in which these specialists have been called together to form a team on behalf of the child involved,
- . the tension between categories of this professional personnel because of overlapping fields of work,
- . the exclusion by certain education authorities of certain categories of professional personnel who could in fact make a significant contribution,
- . the shortcomings existing in respect of this personnel,
- . the divergent and sometimes conflicting professional disciplines that the members of the team fall under,

- . shortcomings in training and experience on the part of some of the professional personnel,
- . a lack of openness towards and knowledge of the contributions that can be made by other members of the professional team in the multi-disciplinary team effort,
- . tension between representatives of different disciplines, etc.

The following additional remarks apply to some of the above problems:

- . The shortage of professional staff and the formulation of ways in which the services of existing personnel can best be utilized to satisfy the needs of the handicapped from all population groups means that urgent attention will have to be paid to the training and better utilization of this scarce human resource. At the same time however, ineffective co-ordination between different education authorities (which stems partly from divided control) and the related lack of uniformity must also be stressed. A striking example in this regard is question of the different names for the personnel attached to the school psychological services; guidance counsellors, counsellor teachers, school psychologists; psychologists; vocational leaders; counsellors; first school psychologists; senior school psychologists, etc. What is even more serious is that the training of this personnel often differs considerably and that the qualifications required for appointment are also not uniform. Rationalization is essential here.
- . At present psychologists and medical and paramedical staff register within different categories with the South African Medical and Dental Council. Social workers register with their appropriate professional councils, while there are other personnel in the team who have specialised training but are not registered and who should register with the South African Teacher's Council. This council does not however make provision for fields of specialization within the teaching profession and excludes all Coloureds, Indians and Blacks as far as membership and registration are concerned.

It is clear that a system for provision of education designed to cater for the specific needs of scholastically impaired, highly gifted and handicapped pupils will have to achieve greater community and uniformity in design and utilization of personnel.

CHAPTER 4

GUIDELINES FOR DESIGNING A SYSTEM FOR PROVISION OF EDUCATION FOR PUPILS WITH SPECIAL EDUCATIONAL NEEDS

4.1 INTRODUCTION

At the beginning of Chapter 3 there is a definition of a system for provision of education and particular reference is made to the different structures concerned, namely the control structure (organization and administration), the educational structure, the finance structure and the supporting services. The investigation into education whose aim was to design a system for provision of education for all pupils (or learners) in the RSA, had from the start to consider each of these aspects and appointed work committees to study the following, inter alia education management (the control structure), education system planning (educational structure); financing of education (finance structure) and matters such as curriculum development, guidance, health, medical and paramedical services, building services, recruitment and training of teachers (all of which to a lesser or greater extent qualify as supporting services).

In this chapter each of the above-mentioned structures will be examined - to tie up with the existing system for provision of education on the one hand and to consider the work done by the above work committees on the other, the object being to lead up to recommendations for a well-grounded system for provision of education for pupils with special educational needs in the RSA. This is an extremely complex task as will become apparent later on because the above structures, although they have been separated from each other here, are interwoven in their mutual implications and in practice it is difficult to discuss them in isolation. Mention should also be made of the fact that one of the major problems facing the various work committees was firstly to properly define their own fields and secondly not to sit back and wait for the other work committees to present their findings.

In addition, the aim of this chapter is not to formulate a system for provision of education for pupils with special educational needs on the basis of or to supplement the findings of other work committees, but rather in the

light of the data collected by this work committee in particular and by means of the views that have come forward as a result of the work of the other work committees to propose possible guidelines for designing a system for provision of education. Obviously each of these guidelines will be expressed in the relevant recommendations in the final chapter of this report. One should also bear in mind that a system for provision of education for children with special educational needs forms part of the system for provision of education for all children in the RSA, and only in the description and/or implementation of the latter system is this system recognizable to a greater or lesser extent as a separate identity.

4.2 THE CONTROL STRUCTURE OF EDUCATION IN THE RSA

The control and administrative structure of education is related to the decision-making authority over all components and functions of education in the RSA. It could also be said that this structure shows at what level of authority what educational functions are carried out in respect of what educational components (Bondesio, 1981, p.10).

It is interesting to note that the Work Committee: Education management conducted its investigation on the basis of the following definition: "Management as the philosophy and practice of decision-making with all the influences brought to bear upon this process by

- a) participatory, consultative and negotiating bodies and procedures, and
- b) the relevance and effectiveness of the research, information and planning available to the decision-making bodies."

In addition, control and co-ordination also received the attention of the work committee concerned. As far as the control and administrative structure of education in the RSA is concerned, and more specifically the education of the child with special educational needs, it is a known fact that at the highest level three Ministers are responsible for education. In the

provision of education for Whites the line passes through the Minister of National Education and the various provincial administrations and CHE to the interdepartmental committees and lower levels of authority. One Minister (the Minister of Internal Affairs) is the head of Coloured and Indian education, while the Minister of Education and Training controls education for Blacks in the White areas. In addition, each national state has its own Minister of Education within the power structure that has already been created within that particular state.

The activities of the WCECSEN did not include an investigation into the control and administrative structure of education in the RSA, for it was felt that this matter would be carefully studied by the Work Committee: Education management. Against the background of the definition of the control and administrative structure and the cursory reference to the situation in South Africa in the previous paragraph, the following remarks are important:

- . The divergent control structures, facilities and provisions for children with special educational needs are most clearly recognizable in the differences regarding finance, the scope and quality of facilities, the specialized professional manpower available, the differences in policy with regard to dealing with children with special educational needs, differences in identification procedures, the variety and scope of the services rendered and the success with which those pupils are cared for from a didactical point of view.
- . Designing a system for provision of education for the RSA (in which a system for provision of education for children with special educational needs is incorporated) should go hand in hand with the creation of mechanisms that will make possible a co-ordinating policy regarding the provision of education for children with special educational needs.

A co-ordinating policy of this kind, irrespective of the control structure in which it may figure, can help to pinpoint several problems including the transition of mainstream education to special education (see Paragraph 4.3), the establishment of norms for the training and utilization of personnel and

in so doing arrange procedures for handling these children thus accomplishing better co-ordination in education.

4.3 THE EDUCATIONAL STRUCTURE

The educational structure is related to the composition of different kinds of education/learning situations and the relations between them. This structure indicates the different possibilities for education and the paths that exist for the flow of pupils (Bondesio, 1981, p.12).

This structure is usually illustrated in the form of a schematic representation or flow diagram which shows the different educational levels (pre-primary, primary, secondary and tertiary), different forms of education (general formative, technical, vocational formative, pre-vocational, commercial education, etc.) and important aspects of this flow of pupils through the education system including the following:

- . the age limits that apply for each level;
- . the field of compulsory education;
- . horizontal and vertical possibilities for the flow of pupils;
- . admission requirements and conditions;
- . the meaningful points of completion for each level, and
- . the way in which pupils with special educational needs are accommodated within the educational structure.

In the RSA with its separate systems for provision of education for Whites, Indians, Coloureds and Blacks there are also separate schematic representations for the flow of pupils through the various systems. One could probably place these diagrams on top of one another only to find that there are in fact no large-scale differences. The most conspicuous difference would probably be the fact that within White education, provision of education for children with special educational needs is linked to a separate control body and it therefore does not correlate too easily with the flow diagrams for ordinary mainstream education.

Without going into detail it is possible to pinpoint a few important matters in respect of the educational structure:

Firstly it should be emphasized that the educational structure is the same for scholastically impaired, highly gifted and most handicapped pupils as for any non-handicapped, non-impaired child. This means that for these pupils (the same) compulsory schooling also applies, the phases of education are the same, the conditions for the flow of pupils through the system are the same and in most cases the diversity in respect of options within the system is the same.

Closely related to the above is the fact that the curricula and syllabuses are the same and that few differences exist in the basic didactical measures that have to be applied. The educational aims are also the same, the aim being to lead the child to maturity. This aspect is also illustrated by the fact that the Department of National Education in providing education for the handicapped conforms closely to the provincial education departments with regard to the above aspects. In addition, the basic admission requirements for tertiary education are the same for all pupils (handicapped or non-handicapped).

With special reference to the highly gifted pupil, the present educational structure makes partial provision for the needs of these pupils by means of differentiated education amongst others (see Haasbroek and Jooste, 1981, p.2). An effort is also made in the same differentiated education system to provide for the needs of scholastically impaired pupils and a certain percentage of slightly handicapped pupils. One should bear in mind however that the main criterion that applies within the differentiated education system is the intellectual ability of the pupil.

The largest single problem that presents itself in the context of the educational structure and one that is closely related to the nature of the control structure, is the policy followed in respect of the admittance of handicapped pupils (and the highly gifted to a lesser extent) to mainstream education. It is an accepted fact that there are large-scale differences of opinion in respect of the advantages and disadvantages of mainstream education on the one hand, and a parallel stream of special education for children with special

educational needs, in particular handicapped pupils, on the other (see Hamilton, 1981, pp. 1-5). Hamilton sums up the situation as follows:

"Authorities throughout the world agree that integration as far as possible is necessary, but there is much controversy about the extent to which and at what stage it should take place in the pupil's life" (Hamilton, 1981, p.5). (Translation)

For the purposes of this report mainstream education is defined as follows in Paragraph 1.2.7: Mainstream education indicates the underlying philosophy of education which aims at also accommodating the handicapped pupil as far as possible within the mainstream of ordinary education before transfer to special education is considered.

Special education is defined in Paragraph 1.2.5 as education of a specialized nature outside the normal mainstream which includes:

- . psychological, medical, dental, paramedical and therapeutic treatment (including operations);
- . the provision of artificial medical aids and apparatus;
- . care in a hospital and school hostel, and
- . provision of transport and physical escort

With the above two definitions as basis it is now possible to examine the advantages and disadvantages of special education and of integrated education (for normal and handicapped children) respectively. The following thoughts are taken from Hamilton's report (1981):

The advantages of accommodating handicapped children in schools for special education outside mainstream education are as follows:

- . The existence of specially equipped schools and classroom facilities, for example special lighting, wiring for projection facilities, sound proofing;
- . the availability of specially adapted aids such as braille books, typewriters, earphones, closed circuit television, adjustable desks, etc.;

- . the availability of specially trained teaching personnel with a knowledge of impairments, techniques and media;
- . the availability of special auxiliary personnel, for example physiotherapists, occupational therapists, speech therapists, remedial staff, mobility staff, nursing and other medical staff who can help pupils with their individual problems or prevent those from worsening;
- . special smaller class groups where a child who cannot be taught by means of the group technique can receive individual attention, for example a scientific experiment that can be demonstrated to blind pupils by allowing each blind person to feel;
- . special personal attention - scholastic and social - can be given to pupils who are absent on a regular basis or for longer periods for medical reasons (for example, about 40 % of the pupils of the School for the Blind require regular specialized service according to the medical report of 1979);
- . special preventive care can be provided - for example trained personnel can keep an eye open for possible deterioration in a pupil's hearing, sight or spasticity;
- . the child feels more secure when he knows that he is a member of a group that understands him and has to contend with similar problems - in other words people do not take advantage of his handicap; he does not have to pretend to be what he is not, for example a person who is partially sighted who pretends that he can see, or someone who is hard-of-hearing who pretends that he can hear; he is not regarded as an inferior, pitiable, ludicrous, peculiar, pathetic member of the pupil community;
- . opportunities for achievement (academically and socially) - and in this way to receive recognition from a peer group on an equal basis - are abundant and are created all the time, and
- . security in an immature phase where the child's emotional, social and personal value system has not stabilized sufficiently to incorporate the otherness of his handicap into his frame of reference.

The disadvantages of accommodating the handicapped child in a special school outside mainstream education are as follows:

It is an expensive undertaking (a special school, aids, provision of staff, travelling expenses, etc.).

The child is removed from his parental home and grows up in an abnormal, artificial environment which is different and is populated differently compared to the normal life outside the residential school situation. This situation does not benefit his present emotional-social development and could lead to subsequent maladjustment.

With regard to the residential school for special education, Prof. Murray refers to the following additional disadvantages:

- The handicapped child within his school context does not learn to adjust to a normal, seeing, hearing and moving school community and wider general community.
- The handicapped child becomes accustomed to an artificial world of handicapped children and members of staff who are over-sympathetic towards him because they understand his problem and make concessions that they should not make.
- It is easy for the staff at a school for special education to develop a distorted image of the standards set in the academic and social context for a non-handicapped child in an ordinary school. Their standards are lowered and the handicapped child gets away with murder.
- The handicapped child often has limited (or no) opportunity for social interaction with non-handicapped children and he lacks the opportunity to prepare and steel himself for the demands of the normal working world.

We will now study the advantages and disadvantages of an education system in which normal and handicapped pupils are accommodated in the same school.

The advantages of integrated education

Financial: It is not necessary to provide special schools and hostels with

special equipment and a special establishment with smaller teacher-pupil ratios. It is also not necessary to provide special transport to bring children over long distances to special schools.

From an emotional-social point of view it would appear that

- . the child does not have to feel different - he attends an ordinary school just like his normal friends, brothers and sisters;
- . the ties between parent and child do not have to be broken because the child does not have to leave his parental home to attend a special school;
- . the child learns from an early age to adjust to a normal seeing, hearing and moving community - he does not become accustomed to an artificial world of handicapped people and staff who understand his problems so that his later venturing into the outside world is a major adjustment, and
- . the child is afforded the opportunity of social interaction with non-handicapped people.

The disadvantages of integrated education

- . The child is a passenger in the ordinary class. He is overlooked and because of his handicap the same demands are not made on him as on the normal child. For example he is not expected to take part in activities in which his handicap will set him back, with the result that he easily feels left out and falls into the habit of dreaming while the class activities pass him by.
- . The child does not learn to become independent, oriented and mobile and is assisted in many ways and taken around.
- . In some cases the emotional involvement of the parent leads to rejection or overprotection of the child or a denial of his problems. In such cases it is better for the child to grow up in an acceptable residential situation.

- . The costs of the aids that must be provided and sometimes used by only one person in the school set-up can be high.
- . Adapted aids will not always be available or ready in time for the individual in ordinary education, for example specific braille books or books in text hand that have not already been printed.
- . Reference sources in braille, text hand and on cassette are expensive and take up a lot of space.
- . The dutiful teacher who cannot see to it that the handicapped child is merely a passenger in the class situation will have to pay attention to the individual handicapped child at the expense of the rest of the class.
- . A handicapped child is unable to take part in all the activities of his classmates and could develop undesirable behaviour deviations, for example either by trying to compensate or acting aggressively or foolishly to attract attention or by withdrawing and becoming an introvert.

Certain circumstances peculiar to the RSA make it difficult to include handicapped pupils in mainstream education. These include the following:

- . Different educational and examining control bodies in White education, namely those of the four provinces and National Education.
- . The vastness of the country. A visiting teacher who must travel from school to school to assist pupils with a specific handicap will spend more time on the road than in the classroom.
- . The relatively sparsely distributed handicapped population.
- . The size of class groups in ordinary education which makes differentiation within the so-called normal school population difficult.
- . The lack of an infrastructure of professional personnel in ordinary

education, for example physiotherapists, occupational therapists, speech therapists, remedial teachers, nursing and medical staff and the shortage of manpower which will make it difficult to introduce an infrastructure of this kind. In addition there is the shortage of well-trained teaching staff over the whole teaching spectrum and the projections in respect of needs for the following decade (Hamilton, 1981, pp.10,11).

Without going into detail about the different education authorities that have been set up in the RSA and the different laws regulating education (more detail is provided in Chapter 2), it can be said that the control structure within White education in particular creates a problem for a greater degree of co-ordination and flow between mainstream and special education. The reason why Coloured, Indian and Black education place greater emphasis on mainstream education is probably because these systems of education have progressed to a less sophisticated level of development compared to that of White education.

Considering the different integration models (See Hamilton, 1981, pp.18-22) and the ideal that the handicapped pupil should be retained or placed in the mainstream as far as is pedagogically desirable, one may conclude that a responsible and conservative policy should be followed in respect of placement of pupils in special education. This implies that the existing sophisticated system of special education for White pupils must be continued and as education for Indians, Coloureds and Black develops the systems of special education will also have to be extended accordingly. These ideas should be read in conjunction with the proposals put forward in Paragraph 4.2 in respect of the control structure, namely a greater degree of co-ordination between the different education systems than is presently the case.

To tie up with the above, mention should be made of the present trend in special education towards increased differentiation and specialization in respect of specific handicaps. Although this trend makes possible high quality didactical assistance it reinforces many of the disadvantages as described in the preceding paragraphs. It is also doubtful whether the relatively specialized and exclusive utilization of staff, duplication of relatively expensive facilities and staff, the greater demands in respect of the correct placement of pupils in schools of this kind make this trend

the proper policy to be followed.

A more comprehensive approach to the creation of provision of special education has many advantages, many of which stand in some relation to advantages of integrated education as summarized above. Within the framework of the didactical structure it is therefore recommended that a movement be made in the direction of comprehensive schools for the aurally handicapped, visually handicapped, physically handicapped, neurally handicapped, for example, instead of the existing tendency towards further specialization.

To summarize, the RSA does not have the finance or the manpower to integrate the handicapped into mainstream education on a general basis, for this process will succeed only if adequate facilities are available or can be afforded and proper supporting and specialized personnel are available.

Sparse geographical distribution of the population means that "day school" facilities for handicapped children can only be introduced in those areas where the incidence rate and population density make this possible. Residential schools are however necessary because of finances and the manpower shortage. The schools' residential facilities must be established in such a way that smaller "residential units" become the acceptable policy. The largest single objection to residential schools for the handicapped is that they are "institutions" where there are small numbers of pupils in relation to the teachers, but in the hostels these children live with a larger number of people isolated from the outside world (Hamilton, 1981, pp. 25,26).

To counteract the negative effect that removal from normal life can have on the handicapped child, in the case of the structures for the Whites, closer co-operation between provincial schools and schools for special education is being advocated. Although this idea has already been implemented sporadically, wholehearted support will have to come from the government. In this way the problem of the ignorance of the teaching staff at ordinary schools in respect of handicapped pupils can be solved to a certain extent.

4.4 THE FINANCE STRUCTURE

The Work Committee: Education for children with special educational needs (WCECSEN) did not conduct research into the finance structure of special education since a special work committee was instructed to do this within the HSRC Investigation into Education. It is understood that this work committee was also requested to study the question of the financing of special education. For a discussion of the numbers of pupils involved in special education and projections in this regard as well as the present finance structure of education in the RSA and the recommendations in this regard, the reader is referred to the report of the work committee concerned.

4.5 THE SUPPORTING STRUCTURE

The supporting services relevant here which were studied in the HSRC's Investigation into Education, are as follows:

- . school guidance services;
- . health, medical and paramedical services, and
- . curriculum development services.

To supplement the above all supporting services concerned with the recognition/identification of and rendering of assistance to handicapped and scholastically impaired pupils on the one hand and the highly gifted on the other are included here. In addition, reference can also be made to all the activities geared to involving the parents of children with special educational needs in a meaningful way in the formal and formative education of their children.

4.5.1 The school guidance services; health, medical and paramedical services and curriculum development services

A work committee of the HSRC Investigation into Education has conducted in-depth research into each of the above fields and it follows as a matter of course that the recommendations made will also apply to children with special educational needs. With regard to curriculum development, the recommendations made in respect of the procedures followed can also be applied to the curricula and syllabuses in special education. One can assume that the recommendations of the work committee concerned will also benefit the

educational situation of the highly gifted child. The same can be said of the recommendations of the Work Committee: Health, medical and paramedical services and those of the Work Committee: Guidance.

4.5.2 Supportive services in respect of the identification of and rendering of assistance to the handicapped and scholastically impaired pupil

This matter was studied by the WCECSEN because several hiatuses were identified in the existing system of identification and rendering of assistance (see Chapter 3). One of the main hiatuses in this regard is the shortage of specialized professional staff to provide for the needs of children with special educational needs. This shortage stretches from remedial teachers in the classroom to medical personnel whose task it is to make certain sophisticated diagnoses of handicapped pupils. Among certain education authorities the shortages are greater and the need for certain categories of professional personnel greater than in other categories. In addition, there is the question of placing at the disposal of so many children the scarce manpower resource as well as the co-ordination of this manpower.

4.5.3 Parental involvement in the education of children with special educational needs

It is a known fact that in the present circumstances parental involvement is not what it should be when it comes to the education of children with special educational needs.

From a pedagogical point of view there are strong arguments in favour of expansion of existing mechanisms of parental involvement and the creation of new mechanisms where necessary. According to Paragraph 4.3 the main disadvantage of special schools is that the child is removed from his parental home and grows up in an abnormal, artificial environment which is different from and is differently populated from the normal life outside the residential set-up. Obviously the child in this situation misses the opportunity, like any other child, of growing up in the loving and trusty atmosphere of his own family.

A separate study (Urbani and Overbeek, 1981) of the matter conducted for the WCECSEN has brought to light needs in respect of stricter school policy for

parental involvement in which inter alia, provision is made for helping parents to become more involved. This investigation has also brought to light another shortcoming, namely the need for guidance for parents with regard to the formative education of their handicapped or impaired child. In the light of the above, greater support for parent groups and associations is recommended.

To further assist parental involvement, it is necessary that a greater degree of decentralization of schools for special education be implemented where possible. This will bring the handicapped child and the parent closer together.

CHAPTER 5

SUMMARY OF THE RECOMMENDATIONS IN RESPECT OF EDUCATION FOR CHILDREN WITH SPECIAL EDUCATIONAL NEEDS

5.1 ORIENTATION: MAIN PROBLEMS IN THE EDUCATION OF CHILDREN WITH SPECIAL EDUCATIONAL NEEDS, EXTENT OF THE RESEARCH AND STARTING POINTS

From the investigation of the Work Committee: Education for children with special educational needs (WCECSEN) a number of central problem areas or hiatuses have come to the fore. Recommendations will be made further on which could provide possible solutions to these problems. The following are the most salient problems.

5.1.1 Divergent control structures, facilities and provisions for children with special educational needs of the different population groups

This divergence in provision of education is apparent in differences in financing, the extent and quality of facilities, in the available specialized professional manpower, in differences in policy in respect of dealing with children with special educational needs, in differences in identification procedures, in the variety and scope of the services rendered, in the successful way in which these pupils are cared for didactically, etc.

Apart from those qualitative and quantitative differences in the provision of education for children with special educational needs, co-ordination problems between the different education authorities are also prevalent in different ways and at different levels.

5.1.2 Shortages of available specialized professional personnel to satisfy the needs of these pupils

There are serious shortages virtually all the way along the line. These shortages are more serious in certain education departments than others, the need for certain categories of professional personnel greater than in other categories, etc. Placing this scarce manpower resource at the disposal of so many children and the optimum utilization of this resource also poses serious problems.

5.1.3 Problems experienced in organizing the education system in such a way that handicapped pupils can best be accommodated in mainstream or special education

The situation in respect of accommodating the handicapped child ranges among the different education departments from almost completely "compulsory" mainstream education to a relatively refined system of provision of special education. In the flexible canalization of pupils with special educational needs out of and back to mainstream education there are large scale shortcomings.

5.1.4 Problems in dealing with the scholastically impaired child within mainstream education

In this area there are large scale shortcomings in the identification of scholastically impaired pupils, the availability of teachers who can provide remedial assistance, making time for providing assistance of this kind, the diagnosis of children with learning problems and designing remedial programmes for them, etc.

5.1.5 Problems experienced and hiatuses in providing properly for the environmentally deprived child

The extent of environmental deprivation among certain groups of pupils is overwhelming. The result is that many pupils leave school too early and this has many serious implications. On the whole not enough provision (in fact almost no provision at all) is being made to see to the needs of these children in education in the RSA.

5.1.6 The neglect of highly gifted and talented pupils in education

A reasonable degree of provision is made for these pupils by certain education authorities while in other departments there is no provision whatsoever.

5.1.7 Parental involvement in the education of children with special educational needs is of primary importance but is not sufficiently encouraged

In cases where adequate provision is not being made for children with special educational needs, greater involvement on the part of the parents in the formative education of these children must be encouraged.

The recommendations made further on stem from the evidence resulting from the following research:

- . an in-depth study of the literature;
- . comprehensive empirical research;
- . evidence of educational practices followed overseas;
- . exhaustive consultations with specialists who are active in the specific fields in the RSA;
- . systematic contributions and comments received from experts in various fields;
- . comments received from and recommendations made by a broad spectrum of interested parties involved in education at a seminar held from 4 to 8 May 1981 at the RAU;
- . the activities of other work committees in the HSRC investigation into Education, namely Guidance; Health, medical and paramedical services; Curriculum development; Education management; Education system planning, and others, and
- . the systematic contributions of the members of the Work Committee: Education for children with special educational needs (WCECSEN).

These recommendations are also made against the background of the following points of departure:

- . The children of the RSA and their educational needs are the primary concern and provision of education in the education system must be regarded as subordinate to this.
- . The proposals are put forward with due consideration for and within the framework of the eleven principles for provision of education for the RSA formulated by the Main Committee.
- . Because children with special educational needs (impaired, handicapped and highly gifted and talented children) must ultimately take their place as adults in society, they should as far as possible and as far as this is didactically desirable and justifiable be accommodated within the mainstream of education. Provision of special education outside but parallel to the mainstream of education should be created solely for those pupils who cannot possibly be accommodated within the mainstream.

The rationale for these recommendations will to a large extent become apparent in the remainder of the report of the work committee. In the case of certain recommendations however, the basic research reports of the contract researchers will have to be consulted.

5.2 CONTEXT: SYSTEM FOR PROVISION OF EDUCATION FOR PUPILS WITH SPECIAL EDUCATIONAL NEEDS

In this paragraph two recommendations are made which refer more specifically to the control structure of education and should therefore be read in conjunction with those of the Work Committee: Education management, and against the background of the following data:

- . The existing provision of education for children with special educational needs, which is a highly specialized matter is inadequate in the case of all existing education departments. The existing provisions are the best developed in education for Whites. Good progress is being made in providing education for Indian children with special educational needs and reasonable progress in the case of Coloureds, whereas the provision for Black pupils is extremely inadequate.
- . The numbers of children for which special education has to be provided as well as the costs involved in providing special education are so vast that it is impossible to formulate an ideal way of providing for these needs. It is therefore essential that recommendations be prepared to make possible the systematic expansion of provision of special education on the one hand and that the most be made of the existing shortage of personnel and facilities on the other.
- . There is virtually no co-ordination worth mentioning in respect of provision of education for children with special educational needs. (In White education there is a measure of co-ordination through the Committee of Heads of Education (CHE) and some of its inter-departmental committees.)
- . More than one government department is concerned with and must contribute to the provision of education for children with special educational needs - the Department of National Education and the provincial administrations, the Department of Education and Training; the Department of Internal Affairs; the Department of Health, Welfare

and Pensions; the Department of Manpower etc.

RECOMMENDATION 1: *In designing a system for provision of education for the RSA, mechanisms should be created to formulate a co-ordinating policy in respect of provision of education for children with special educational needs.*

(It is necessary to spell out this policy so as to facilitate the transition from mainstream to special education, to establish norms for the training and utilization of personnel, to organize procedures for handling these children so as to improve co-ordination in education, etc.)

RECOMMENDATION 2: *The education authorities should accept responsibility for establishing and controlling services in which specialized functions have to be carried out on a co-operative basis, the co-operative Educational Service Centre (CESC) for example, with due respect for the jurisdiction that the professional councils have over the functionaries who are registered with them. (The concept "education authorities" will have to be defined in the light of the recommendations of the Work Committee: Education management.)*

5.3 THE CREATION OF AN INTRASTRUCTURE WITH A VIEW TO EFFECTIVE IDENTIFICATION, EVALUATION, DIAGNOSIS OF, RENDERING ASSISTANCE TO AND THERAPY FOR CHILDREN WITH SPECIAL EDUCATIONAL NEEDS

5.3.1 General background for the recommendations

The exposition in Chapter 2 in respect of the present situation in education for the handicapped, impaired and highly gifted child has brought to light the same dual problem, namely the matter of initial recognition or identification with a reasonable degree of effectiveness at school level followed by appropriate assistance on the one hand, and more intensive but also more specialized identification (and diagnosis) on the other, and where necessary follow-up specialized assistance and therapy when it is obvious that the problem is too complex to be dealt with properly in the classroom.

The recommendations in this paragraph (Paragraph 5.3) apply more specifically to identification and rendering assistance within the class context and insofar as the school clinics render assistance within this context. Paragraph 5.4 contains recommendations formulated with a view to covering advanced diagnosis and evaluation and the problems concerned.

5.3.2 Provision of education for scholastically impaired children

It stands to reason that the scholastically impaired child as well as the handicapped child has learning problems and should be assisted. Provision must therefore be made for remedial education in both mainstream and special education. One should bear in mind however that scholastic impairment may be a pathological symptom but is mainly a symptom of the fact that the school system in conjunction with the family cannot satisfy the needs of children in formal and formative education and will never be able to do so properly in the future. Scholastic impairment is therefore a phenomenon that is here to stay in every educational system and will have to be identified in the best possible way.

The recommendations that follow are based on the following facts:

- . The scholastically impaired child does not achieve according to his ability. This underachievement can be totally or partially counteracted but the circumstances of each and every scholastically impaired child are extremely complex and unique and a great deal of expertise is required to identify and remedy these problems in a scientifically justifiable way. Learning problems can be traced back to the learning history of the scholastically impaired child himself on the one hand, but also to the total psychic and physical set-up on the other - an extremely complicated interplay of factors which should be regarded as a unit. In the case of the handicapped child on the other hand the process of counteracting the scholastic impairment is often even more difficult.
- . The following aims should apply in the education of the scholastically impaired child: eliminating the health problems and/or unfavourable educational situation, underachievement and the symptoms or influence of these on the child's total personality development. In this system special attention should be paid to preparing the child for learning (throughout his entire school career and in respect of the whole spectrum of the dimensions of learning readiness).

Criteria for the identification and evaluation of and remedial assistance for the scholastically impaired child are required for use by -

- the ordinary class teacher in primary school;
- the remedial teacher;
- the secondary school teacher, and
- the educationist.

If a child is identified as being scholastically impaired he must be referred for a complete evaluation by the team of specialists. This is an ideal that can probably not be realized in the near future because of the shortage of specialists in the field, but it is obvious that the teacher in the classroom cannot deal with the full implications and causes of the impairment without further aid.

The class or subject teacher plays the key role in the initial identification and implementation of remedial measures when it comes to integrating the pupil in the ordinary mainstream class situation. To be able to play this role the teacher should be specially trained and assisted by remedial teachers in primary school and guidance teachers in secondary school. In mainstream education these two types of professional members of staff should form the link between the class or subject teacher and the professional personnel of the Section for Evaluation and Guidance (SEG) of the co-operative Educational Service Centre (CESC) (See Paragraph 5.4) if applicable, i.e. where in the case of a particular child a comprehensive profile is compiled and advice or a remedial programme is prepared.

In the case of the scholastically impaired child the emphasis should also be on prevention rather than remedial assistance. Here pre-school compensatory measures and measures to prepare the child for learning on the one hand and general screening examinations and follow-up treatment when the child starts school on the other, can contribute much to fighting scholastic impairments.

Whereas the scholastically impaired child requires only remedial treatment in primary school, in secondary school he will rely on remedial treatment as well as counselling (predominantly) because as he progresses in his school career his scholastic impairment becomes increasingly irreversible. Canalization of scholastically impaired pupils from the ordinary to the practical course should be done by

the school concerned in collaboration with the staff of the SEG after these pupils have been diagnosed properly on the basis of pedagogical criteria.

The classification of scholastically impaired pupils into Group A pupils (those who can be assisted in the ordinary classroom situation), Group B pupils (those who receive remedial assistance within the ordinary school situation outside the mainstream classroom situation) and Group C pupils (those who have to be channelled towards special education) is practical and acceptable, but the distinction between Group A and Group B pupils is regarded primarily as being of administrative value. The following measures for implementation merit attention however:

- the formulation of clearer criteria for identifying Group A pupils is necessary because often these pupils pass through school unrecognized;
- auxiliary classes (a junior and a senior auxiliary class) should in time be introduced at all primary schools. This means that the maximum age limit of nine years for an auxiliary class should be raised to twelve years at least. In this way Group B pupils can receive remedial education for a longer period in order to be classified as Group C pupils after two years.

The data contained in Chapter 2 show clearly that the same hiatuses experienced in White education with regard to the above matters appear on a larger scale in the case of provision of education for Coloureds and Blacks. In addition, it is a known fact that a large percentage of teachers are not qualified. Although the following recommendations will probably be put into effect in White education in the foreseeable future, an effort should be made to implement a similar infrastructure as soon as possible for all systems for provision of education. The aim is to create machinery, at first or primary level where the problem occurs, which can be extended gradually as the available provision of education for all population groups becomes more sophisticated.

The above remarks contain guidelines for provision of education for scholastically impaired pupils, and have not been put forward as recommendations because they place too much emphasis on detailed implementation of policy at micro and mesodidactical level. The following recommendations which refer more specifically to global provision of education are made:

RECOMMENDATION 3: Provision should be made in the basic and in-service training of teachers, to train them to be able to identify children with learning problems and to provide remedial treatment within the class context.

RECOMMENDATION 4: There should be a remedial teacher at every primary school or group of smaller primary schools. This teacher should, besides her basic diploma in teacher training, have a specialized diploma in remedial education and should be responsible for (i) liaison with and guidance of class teachers, (ii) the presentation of auxiliary classes, and (iii) liaison with the school clinics and the SEG of the CESC.

(Obviously the remedial teacher at primary schools will have to be phased in systematically and trained by means of in-service training programmes (a task in which the professional personnel of the CESC can play a significant role). During the transition period one remedial teacher will have to serve more than one school.)

RECOMMENDATION 5: There should be at least one guidance teacher at every secondary school. This teacher should be qualified in orthopedagogics/orthodidactics/pedagogical psychology and general guidance and should be responsible for inter alia (i) liaison with and guidance of subject teachers in respect of pupils with learning problems, (ii) liaison with the school clinics, and (iii) these teachers should be attuned to the vocational guidance system.

(Obviously the guidance teacher in the secondary school will have to be systematically phased in. The minimum qualification for a guidance teacher is a degree with Psychology as a major subject and specialized teacher training in orthopedagogics, orthodidactics and school guidance.)

RECOMMENDATION 6: Uniform minimum training requirements should be laid down for teachers, remedial teachers and guidance teachers and all these teachers should also register with a South African Teachers' Council.

It is apparent from the investigation into the role played by professional persons from the private sector in diagnosing and assisting pupils with special education needs that these persons are often not registered with a statutory occupational council. It is essential however that they should fall under and satisfy the requirements of the discipline of a professional occupational council when it comes to their qualifications and the functions to be carried out. In the light of the extent of and possible contribution to and the need for remedial services existing in the private sector, the following recommendation is made:

RECOMMENDATION 7: In the light of the valuable contribution that can be made in this field by professional persons from the private sector, mechanisms will have to be created to ensure co-ordination between their activities and those of the school clinics and the SEG of the CESC still to be established.

The above recommendation implies inter alia that professional persons who are active in the private sector can be included in the SEG of the CESC on a consultative basis with a view to holding consultations, standardization and co-ordination of activities.

5.3.3 Provision of education for environmentally deprived children

Because of deprived socio-economic and subcultural circumstances, environmentally deprived children are not exposed to the experiences necessary for successful learning and progress at school.

The extent of environmental deprivation varies among the different school populations in the RSA. A great deal of research has been conducted on the environmentally deprived child, and a unique picture has emerged. The important question is whether or not the total educational system should aim at a compensatory strategy and whether provision should be made for compensatory education where individual pupils require it. The following background data have a bearing on the recommendations made further on:

A classical school system is based on the scientific system (the ordered wealth of knowledge). This is universal and for the scientific system as we know it there are basically no alternatives. This scientific system into which pupils are guided through education has

been and is to a large extent a prerequisite for a technological society. The school system therefore also makes universal demands on pupils in respect of foreknowledge and exposure to experience.

To compensate for shortcomings in foreknowledge and exposure to experience, compensatory educational measures have been designed throughout the world and these have been tested out and evaluated on a large scale. Unfortunately on the whole the successes achieved with these extremely expensive measures have been most disappointing. Consequently, compensatory strategies cannot be recommended on the basis of these results. The most successful of these strategies are those in which a comprehensive strategy is followed; the family, school and child are simultaneously made the target of innovation, and those which are consequently the most expensive.

The most promising educational strategy in respect of the environmentally deprived child is specially designed pre-school education of a high standard coupled with programmes to prepare the child for learning on the one hand, and didactical strategies in which an inductive rather than a deductive approach is followed on the other. These strategies coupled with occupation-oriented education have yielded promising results.

The problems surrounding the environmentally deprived child are closely tied up with socio-economic conditions (inequality of opportunities, etc.) and this is therefore a very sensitive area politically speaking. Compensatory educational measures can never compensate for inequality or injustice in society. Compensatory education does not imply that certain cultures and subcultures are inferior. Certain circumstances of life do not provide or provide to a lesser degree those experiences that are necessary for and promote learning and progress at school.

Against this background the following recommendations are made:

RECOMMENDATION 8: The NSRC in collaboration with all interested parties should co-ordinate activities to design programmes for preparing pupils for learning and make these programmes available for use in education where pupils require them.

(Here pre-school and junior primary education should be given priority.)

RECOMMENDATION 9: *The design of curricula and syllabuses should take into consideration the style of learning of the environmentally deprived child.*

RECOMMENDATION 10: *The educationist (compensatory education) should be trained in the educational problems of the environmentally deprived child so as to be able to provide specialised guidance in respect of the educational needs of these children and their parents.*

(See the recommendations in Paragraph 5.4)

One should bear in mind that the environmentally deprived child will be strongly represented in the category of the scholastically impaired (and handicapped) pupil.

5.3.4 Provision of education for highly gifted pupils

All the specific recommendations made in respect of education for the highly gifted cannot be repeated here. A few remarks and recommendations will therefore have to suffice.

Enough research has been carried out to prove that uniform terminology can be used and that in the case of the highly gifted early recognition is essential. The latter is a highly specialized task in which, in the first phase, a panel is best equipped to do the initial identification and in the second phase a more intensive investigation should follow. This is an extremely difficult task and the necessary psychometric instruments are still lacking to a large extent. The younger the child the more difficult the task is. At this point in time the identification of the environmentally deprived highly gifted pupil is a question that requires urgent research.

The designing of educational programmes for the highly gifted forms the core of provision of education for these children. These pro-

grammes should cater for the specific interests of individual pupils and should as far as possible be designed for all school subjects. The designing of improved individualized interactive computer-assisted educational programmes in specific subjects, with a view to enriching the subject-matter itself rather than exposing pupils to a wide range of subjects, is one of the promising strategies but one that still requires more refinement and research.

The training of teachers for the highly gifted is a matter that should enjoy top priority. It is essential that there should be teachers who can recognize the highly gifted pupil, design educational programmes for him, give him proper guidance and the necessary stimulation, etc.

Against this background the following recommendations are made:

RECOMMENDATION 11: Directed and advanced courses (preferably in the form of a B.Ed. endorsement) should be instituted on an in-service training basis. Only selected teachers should be admitted to these courses. These courses should train candidates to recognize highly gifted pupils (as well as handicapped, scholastically impaired and environmentally deprived pupils), to design enrichment programmes on an individualized basis and to orient them in respect of research on the highly gifted.

RECOMMENDATION 12: Provision of education for the highly gifted should throughout be made only within and supplementary to mainstream education.

In principle the system of differentiated education provides enough scope for provision to be made (with the necessary initiative) for the highly gifted, if properly trained teachers who are sensitive to the needs of these pupils are available.

The following educational strategies show promise for highly gifted pupils: homogeneous grouping, acceleration, enrichment with the assistance of subject specialists amongst others at tertiary institutions of education, available centres, etc.

5.3.5 Involving parents in the education of children with special educational needs

Parental involvement in all education is essential. In the case of education for the child with special educational needs, parental involvement is even more essential and is qualitatively different and obviously far more demanding.

The study of parental involvement in the education of children with special educational needs has brought to light the following needs:

- . each school should have a written policy on parental involvement;
- . both parents should be involved;
- . parents should be briefed more systematically on how to bring up and care for their children, and
- . worthwhile parent evenings and parent days should be arranged. These functions should be structured, suitable and pedagogically justified.

On the basis of the above the following recommendation is made:

RECOMMENDATION 13: The school social worker of the CESC (See Paragraph 5.4) is responsible amongst other things for liaising with the schools in his/her area in order to encourage the involvement of parents with children with special educational needs.

(At parent evenings the staff of the CESC, as well as the remedial teacher and the guidance teacher should be involved. Where necessary the school social worker should also liaise with the social worker in a specific region.)

5.3.6 Provision of education for handicapped children

5.3.6.1 There is a tendency in provision of special education towards increased differentiation and greater specialization in respect of specific handicaps. Admittedly this does give rise to didactical guidance of a high standard but also has the following implications: relatively specialized and exclusive utilization of personnel; relatively expensive physical facilities; greater demands in respect of correct placement of pupils in schools of this kind; unavoidable limitations in the facilities that can be afforded; a restriction

of the mainstream dimension in the education of these children, etc.

One should also not lose sight of the fact that throughout the ideal is to keep or replace the handicapped pupil in mainstream education insofar as this is didactically desirable. Although the trend overseas seems to be moving towards subjecting the handicapped child to unjustified and total integration in the mainstream, the tendency in the RSA seems to be to follow a responsible and conservative policy in respect of placement in special education. This approach should be continued as far as possible.

RECOMMENDATION 14: *In the provision of educational facilities there should be greater movement towards comprehensive schools for-*

- . *the aurally handicapped*
- . *the visually handicapped*
- . *the physically handicapped*
- . *the mentally handicapped*
- . *the neurologically handicapped*
- . *pedagogically neglected special care children*

(rather than separate schools for 22 or more kinds of handicapped pupils).

The restoring to mainstream education of non-handicapped pupils who have been admitted to special education schools is a matter that requires serious and urgent attention. The practice of placing these children in special schools is totally unnecessary and is probably related to the unsatisfactory way in which scholastically impaired pupils are handled in mainstream education.

The specialized skills which are necessarily provided in a comprehensive special school should where possible be open to children with the handicap concerned (and their educators) at pre-school level and in mainstream education.

5.3.6.2 General and specific matters in respect of education for handicapped children

As mentioned in Chapters 1 and 2, the investigation into the education of

handicapped children is extremely comprehensive and the findings will ultimately be published in a separate report. The 22 categories of handicapped pupils listed earlier on have been studied, defined, evaluated and recommendations formulated. In this chapter only the most salient matters can be touched on and the following recommendations are made for continued research without further motivation:

(1) Early recognition and prevention of handicaps

- . This matter should be given priority and the necessary infra-structures should be created systematically.
- . Efforts should be made to compile a comprehensive antenatal risk register which could serve as an aid with the rearing and training of children with special educational needs.
- . The necessary follow-up guidance services should be instituted with a view to timely guidance for those concerned.

(2) Dealing with the handicapped child in remedial and special education

- . Too early labelling of children should be avoided.
- . In the treatment of the child a multidisciplinary approach should be applied throughout and there should be co-operation between the different professions involved.
- . Educational programmes should be applied after hours in the hostels by suitably trained hostel personnel.
- . There should be maximum integration of the handicapped child with his parental home, ordinary neighbouring schools, other special schools and society in general.
- . Timely and meaningful vocational education should be provided with a view to the effective integration of the child into the occupational world and community that he is likely to join. This requires an urgent study of the relevance of curricula and syllabuses.

- . There should be educational say and feedback in respect of medication while the integration of medical and paramedical services should form an integral part of the school's tuition programme.

(3) The transition, replacement and aftercare of handicapped pupils in mainstream education

- . Pedagogically justified guidelines should be formulated with a view to providing the most effective method of replacement and guidance by the professional personnel concerned of those children who qualify to change to the mainstream of ordinary education.
- . The transition from secondary to postschool training and tertiary education or the occupational world should take place systematically.
- . Attention should be paid to the necessary infrastructure for liaison between education departments, children's hospitals and psychiatric services on behalf of the child.

(4) Teacher training for special education

- . The inadequate qualifications of staff is a matter that requires urgent attention and in-service training should also be instituted for the hostel staff. Specific minimum qualifications in respect of special education can be laid down as a requirement for permanent appointment.
- . Provision should be made in all basic teacher training for training in the identification and first phase treatment of handicapped pupils in ordinary schools and in the existing facilities and reference procedures.
- . Suitable teachers and auxiliary personnel should be selected and recruited.

(5) Incidence and statistics in respect of the handicapped

- . Comprehensive differentiated statistics should be kept up to date and made available on a systematic and continuous basis with a view to

planning.

(6) The CHE Document (GP-S (80))

. This document is accepted in its present form as a useful guideline.

. The document should however be revised as soon as possible with a view to eliminating certain anomalies, obsolete systems of classification and pedagogically unacceptable concepts viewed in the light of recent scientific evidence.

(7) Continued research in respect of the following matters merits serious attention

. Clarifying certain concepts with a view to improved multidisciplinary communication.

. The nature and occurrence of linguistic problems as distinguished from aphasia.

. Maximum utilization of the work power of the handicapped.

. The position of the gifted child in special education.

. The position of and the problems surrounding the child with multiple handicaps.

(8) The aurally handicapped, including the deaf and hard of hearing child and the child with partial hearing

. Artificial classification into subcategories of the deaf and hard of hearing child and the child with partial hearing should be eliminated. These distinctions are obsolete and pedagogically unjustified. The most important criterion is the educational potential and progress of the child and not his quantitative specific hearing loss. The criterion of hearing loss in terms of decibels should not be regarded as the most important and/or only criterion in planning because there are objections to the use of a decibel intersect.

. The aurally handicapped child should be accommodated within main-stream education for as long as possible with a view to maximum language stimulation, and the necessary supporting facilities should be provided.

. The identification of the pre-school aurally handicapped child is a serious problem and the existing models should be considered on the basis of further research with a view to implementation on a countrywide basis.

(9) The visually handicapped, including the blind, partially sighted and deaf-blind child

. A study should be made of the size to which schools for the visually handicapped should be allowed to grow.

. The position of the deaf-blind child should be defined more specifically.

(10) The mentally handicapped including the educable trainable and special care child

. The IQ interest should never be used as the only and/or the main criterion in the placement of the child, especially the environmentally deprived child.

. Educable pupils should not be allowed to leave school before the age of 18.

. The year level system should be changed to a Std 8 (special) certificate for example, because the present designation is confusing and has a stigma attached to it.

. The Practical Course in ordinary schools should also be introduced in schools for educable pupils so as to accommodate meritorious pupils.

. The existing confusion in respect of dealing with the special care

child with an IQ of + 15-25/30 should be studied and sorted out.

- . Consideration should be given to the possibility of placing an educable pupil in a proper work situation on a part-time basis during his last year or two of schooling.
- . A study should be made of the in-service placement of educable pupils, and recognition of these pupils' school qualifications with a view to apprenticeships.

(11) The neurologically handicapped, including the cerebral palsied, epileptic, aphasic, autistic and serious specific learning disabled child

- . Only cerebral palsied children who are diagnosed as such should be admitted to the appropriate schools.
- . An investigation should be conducted into the accommodation of both the primary and secondary school courses in the same school.
- . Cerebral palsied children under the age of three should not be admitted.
- . In principle the epileptic child should be kept in mainstream education and only in cases where the child's condition is complicated by focal epilepsy or the uncontrolled nature of the condition should consideration be given to placing him in a special school.
- . Student teachers should be oriented in respect of the epileptic pupil in ordinary schools.
- . Attention should be given to a scientific but more comprehensive differential definition of the aphasic pupil and a differentiated course should be provided for these pupils at schools for the aurally handicapped.
- . Provision of personnel for the aphasic child should be the same as for the autistic and cerebral palsied child.

- . School holidays for autistic children should be shortened because parents cannot cope with a sustained educational task.
- . The transfer of autistic children to an ordinary school should be done carefully and in phases with a view to gradual integration.
- . Pupils with a serious specific learning disability with a patent defective neuropsychological base should be accommodated in separate schools.
- . The position of the serious specific learning disabled Black, Coloured and Indian child merits urgent attention.

(12) The pedagogically neglected child, including the special care child, the juvenile delinquent, the emotional/behaviour deviant and the psychologically seriously disturbed child*

- . Ways and means should be sought to place children's homes, Children's Act schools and places of safety under the same control, preferably under that of a department that is best equipped to see to the needs of these children.
- . Children with no behaviour deviations who reside in children's homes should not be placed in Children's Act schools.
- . Attention should be given to the size, construction and geographic placement of Children's Act schools and children's homes, but more specifically to smaller hostels and contact with other schools and society in general.
- . Provision of services on the basis of a multidisciplinary team should enjoy top priority.

* The work committee is aware of the fact that there is an interdepartmental committee that studies the referral of children to Children's Act schools, places of safety and children's homes. Since this report is on a macro scale in respect of its recommendations, the work committee feels that its recommendations will not prejudice the activities of the above-mentioned interdepartmental committee.

An in-depth evaluation should be made of how the total situation of the juvenile delinquent is dealt with, with special reference to the quality of the present re-educative programme.

Long-term follow-up studies of pupils who have been discharged from Children's Act schools should be undertaken with a view to possible future adjustments of the present educational situation.

Attention should be paid to the critical shortage of child psychiatrists and their training.

4 THE SECTION FOR EVALUATION AND GUIDANCE (SEG) AS PART OF THE CO-OPERATIVE EDUCATIONAL SERVICE CENTRES (CESC)

4.1 Motivation for centres of this kind

Reference has already been made in Paragraph 5.3 to the hiatuses in the present system for provision of education in respect of effective identification, evaluation, diagnosis and rendering assistance to children with special educational needs. Recommendations were formulated in Paragraph 5.3 the object being to implement a system of provisional identification and rendering of assistance at schools with the inherent possibility for refined diagnosis and assistance at school clinic level. Several serious shortcomings in the present system have shown however, that the introduction of more all-embracing co-operative centres, where a team of professional staff can work together in diagnosing and evaluating pupils, is an urgent need. Before examining the particular nature of co-operative centres of this kind and their affinity with existing school clinics, the following shortcomings in the present practice of diagnosis and provision of assistance will be discussed as background data to the recommendation:

There is an excessive shortage of professional personnel who should provide specialized assistance to children with special educational needs and their parents and teachers.

Some educational institutions have numerous school clinics while others have only one or none at all.

- . There is a lack of co-ordination of services in existing clinics. (The result is that many parents tend to go from clinic to clinic in search of a "professional person" who in their estimation can offer a satisfactory explanation of or solution to the problems of their handicapped or impaired child.)
- . There is no complete and officially acceptable differential diagnosis by a multidisciplinary team.
- . There are bureaucratic delays between diagnosis and follow-up treatment.
- . There is polarization between interested department and/or organizations and bodies.
- . There is polarization between different categories of professional personnel (especially between doctors, educationists, psychologists and social workers).
- . There is fragmentation and uneconomic utilization and overlapping of facilities and services.
- . The compilation of special reports is useless because the professional personnel do not understand each other's terminology.
- . There is uneconomical re-testing and conflicting diagnoses are made with the result that parents and teachers become confused.
- . There is confusion about the exact place and functioning of clinics and the acceptance of the bona fides of professional personnel.
- . There is ignorance about the need for research in respect of the diagnosis of and design of programmes and guidance for Black children in particular.
- . Recognized organizations and bodies concerned with assisting children do not co-operate and exchange reports.

The following recommendation is put forward:

RECOMMENDATION 15: *A co-operative Educational Service Centre (CESC) which incorporates a section for Evaluation and Guidance (SEG) should be established in every defined educational region (or service area).*

4.2 The functioning of the Section for Evaluation and Guidance (SEG)

4.2.1 Nature of the SEG

The task of the SEG includes comprehensive diagnosis, designing remedial educational programmes and guidance. The SEG does not provide continuous remedial and other assistance, therapy, special education, etc. This is provided within the various educational institutions where guidance, re-diagnosis, follow-up treatment and in-service training can be done by the staff of the SEG.

Comprehensive evaluation includes an evaluation, diagnosis, guidance and designing programmes by a team comprising educationists, social workers, psychologists, medical doctors and paramedics. The SEG therefore provides preventive as well as diagnostic and guidance services in that evaluation, diagnosis and guidance are provided for children (from birth onwards) as well as parents (a genetic advisory service is also included).

4.2.2 Personnel of the SEG

In Chapter 2 reference was made to the fact that at present there is little uniformity among the different educational authorities with regard to professional personnel when it comes to the identification, evaluation and diagnosis of children with special educational needs. Reference was made in particular to differences in designations, training and qualifications that are expected from school psychologists, teacher psychologists, guidance teachers, persons involved in the fields of orthopedagogics and orthodidactics, school social workers, sociopedagogues, etc. A result of this is that there is an overlapping of fields and this leads to friction between highly qualified personnel. It is therefore imperative that throughout, sensitivity and openness towards a multidisciplinary approach should be fostered among members of the team and that this should be emphasized during training in particular.

To create greater clarity and rationalization in respect of these team members, the Work Committee: Education for children with special educational needs as a result of its findings held in-depth discussions on the personnel who should be involved in the school clinics and co-operative evaluation and guidance centres and laid down guidelines for the functions and training of the following team members:

- . educational psychologist
- . educationist (orthodidactics)
- . school social worker
- . educationist (compensatory education)

An educational psychologist is someone who has been registered in terms of Act No. 56 of 1974. He has five consecutive years of training in psychology, has served an internship of 18 months at an approved institution and is capable of using diagnostic tests and making corrections in terms of diagnoses that have already been made.

The educationist (orthodidactics) has qualifications as laid down by an appropriate professional council. His functions include the interpretation of data, the development of didactical programmes, didactical evaluation, consultation with the teacher and remedial teacher in particular and the implementation of educational and remedial programmes. The school social worker is registered according to Act No. 110 of 1978 and is responsible for family guidance, the socialization of the child and for dealing with problems that may arise in the child's transition from mainstream to special education or vice versa.

As the name indicates the primary task of the educationist (compensatory education) is the formal and formative education of the environmentally deprived child, his particular task being to design and implement compensatory programmes, to offer advice on curriculum development and to assist volunteers involved in the education of environmentally handicapped children and their parents. Family based compensatory aid is also a complex educational task that he must see to.

The above is merely a brief and preliminary exposition of some of the main functions of the functionaries mentioned. In the light of this the

following categories of professional personnel are proposed for a fully developed SEG:

On a full-time basis

The head as team leader/co-ordinator
Doctor
Educationist (compensatory education)
Educationist (orthodidactics)
Educational psychologist
School guidance teacher/Counselling psychologist
School social worker
Nurse

Medical specialists, paramedics and legal advisors will also be included on a part-time and consultative basis. It is important that professional personnel in particular who are involved in the SEG on a full-time basis should also play a part in the in-service training of staff at the SEG as well as related personnel.

In the light of the above the following recommendations are made:

RECOMMENDATION 16: The training of educationists (orthodidactics), who are responsible for designing remedial programmes for children with learning problems with a view to the remedial or class teachers at schools implementing those, is an urgent matter.

RECOMMENDATION 17: Educationists (compensatory education) should be trained to implement compensatory programmes, to offer advice on curriculum development in respect of the environmentally deprived child and to organize family-based compensatory assistance for parents and children.

RECOMMENDATION 18: Within the context of the SEG the task of the school social worker should include family guidance, socialization of the child and dealing with problems that may arise in the transition from mainstream education to special education or vice versa.

Recommendations 16 and 17 imply that the faculties of education at universities should pay attention to research on and the training of educationists in orthodidactics and compensatory education.

5.4.2.3 Registration with a statutory teachers' council

It is imperative that the existing professional personnel involved in the tasks of evaluation and diagnosis of and providing assistance and guidance for impaired and handicapped children and who have undergone predominantly educational training, should be subject to the discipline and registration requirements of a professional council. The committee does not wish to express an opinion on what the fields of jurisdiction of the three professional councils for psychologists, social workers and teachers in particular should be, for it feels that these professional bodies should judge for themselves. The above-mentioned two categories should be able to register with a statutory teachers' council.

RECOMMENDATION 19: A statutory teachers' council where all professional educationists who work at the SEG can register, should be established for all teachers in the RSA.

RECOMMENDATION 20: The categories of registration, educationist (orthodidactics) and educationist (compensatory education) should be instituted at a statutory teachers' council with a view to the registration of these professional personnel.

5.4.2.4 Facilities of the SEG and phasing in

The SEG serves all children (pre-school up to and including secondary school pupils) and their educators in a particular region. The SEG should therefore house the school guidance service and the comprehensive evaluation and guidance services for impaired and handicapped children and their educators.

The systematic provision of services and the expansion of the SEG will have to be phased in by using as many of the existing facilities as possible on the one hand and systematically increasing the professional personnel on the other. The first step for example could be to start with a full-time

community health nurse (who is to a large extent already being used) and other professional personnel on a part-time or consultative basis. This will also imply the expansion of existing facilities (either physical facilities and/or staff, for example those attached to university clinics, hospital and community clinics, special schools, etc.). The use of students in-training to expand the services could assist a great deal.

5.4.2.4 The relation between the SEG and school clinics

School clinics which are under the same control as the schools in a specific region serve as an intermediate body between the SEG and schools. Personnel attached to school clinics consist of the same categories of team members working at the SEG. Comprehensive evaluation, diagnosis and guidance as well as assistance, therapy, remedial treatment, compensatory education and parental guidance can be provided at school clinics. School clinics form an integral part of an education authority's provision of education in a particular area or region. The staff at school clinics and the teaching staff at schools work together as a team. Personnel of the SEG can also assist with the in-service training of personnel at school clinics.

An infrastructure for the education of and the rendering of assistance to children with special educational needs should be built up simultaneously within schools and school clinics. Initially the staff at the school clinics will have to serve more schools and provide in-service training for teachers.

It is only in cases where the personnel at school clinics cannot deal with specific problem situations satisfactorily that the assistance of the SEG will be sought.

5.5 RESEARCH REQUIREMENTS

The investigation has shown clearly that in many fields there is not a sufficiently strong rationale for making specific policy recommendations because of the lack of research. There is a great need for further research in a variety of fields. These fields are indicated in a separate publication to appear later. Research in these fields could play an important role in further expanding and improving education for children with special

educational needs, and is extremely important.

5.6 PRIORITIES

Provision of education for children with special educational needs should always be second to efforts to involve all children in the mainstream of education, but those children who are in fact admitted to the educational system should receive a minimum service from professional personnel. An infrastructure should therefore be built up systematically by those education authorities that do not have a properly developed infrastructure or do not have one at all.

Although it can be said that provision of education for children with special educational needs is an expensive undertaking, studies have shown that it is an economic proposition to rather try and satisfy the educational needs of the handicapped child because the burden of a special care adult is far greater. In the light of this the problem should be tackled on both fronts, i.e. mainstream educational facilities should be introduced for all pupils on the one hand and an infrastructure should be created to provide for the needs of those children who enjoy education but have special educational needs, on the other.

The role that the community can play in the expansion of special educational facilities should not be underestimated. It is essential that welfare organizations, private initiative and other interested parties should be encouraged to help establish growth points for special education.

In the light of the above the following two recommendations are made:

RECOMMENDATION 21: Provision of education for children with special educational needs should always be second to efforts to involve all children in mainstream education, but the children who are in fact admitted to the educational system should receive a minimum service from professional persons. Services of this kind should therefore be introduced systematically in cases where they are not yet in existence.

(It is always far more desirable, where possible, to create this provision within mainstream education.)

RECOMMENDATION 22: (Bearing in mind that historically speaking special education has a specific course of development.)

The activities of churches, welfare organizations, private initiative and other interested parties should be stimulated and assisted by the initiative of the school social worker and the educationist (compensatory education) in particular to create an infrastructure for the education of children with special educational needs.

So far as the priorities in provision of education for children with special educational needs are concerned, the following order of priorities is justifiable: the highly gifted, the scholastically impaired, the environmentally deprived, the handicapped. Here, however, the one should not suffer at the expense of the other.

5.7 CONCLUSION

This report is a study of the provision of education for children with special educational needs. Recommendations were made with a bearing on the particular educational needs of the highly gifted, the scholastically impaired, the handicapped and the environmentally deprived child. Further research on several aspects of the field of investigation appears to be necessary and more details in this regard will appear in a separate publication.

BIBLIOGRAPHY

- ANDERSON, J. & ROBERTSON, B.A. Children with emotional, behavioural or learning problems: memorandum. Pretoria: Human Sciences Research Council. Investigation into Education. Work Committee: Education for Children with Special Educational Needs, 1981.
- ARENS, L.J. Comments on: Gouws, M. Die onderwys van serebraal gestremde kinders. Pretoria: Human Sciences Research Council. Investigation into Education. Work Committee: Education for Children with Special Educational Needs, 1981.
- BARKER, E.R. Kommentaar op: Gouws, M. Die onderwys van serebraal gestremde kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.
- BEKKER, J.P. Verstandelik gestremde opleibare kind (Kleurling). Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys. 1981.
- BIESHEUVEL, S. (The significance of the environmental disadvantage for the educational system.) Pretoria: Human Sciences Research Council. Investigation into Education Work Committee: Education for Children with Special Educational Needs. Advisory Sub-Committee on Environmental Disadvantage, 1980.
- BOSHOFF, H.C. Gestremde kind-kategorie C. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

THA, T.R. Groep C leergestremde kind. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

HRMANN, M.V. Onderwys van die outistiese kind. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

ILD WELFARE SOCIETY. (Comments). Pretoria: Human Sciences Research Council. Investigation into Education. Work Committee: Education for Children with Special Educational Needs, 1981.

OTE, C. de M. Emosioneel-gedragsafwykende kind. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Die Onderwys van die Gestremde Kind Buite die Hoofstroom van die Gewone Onderwys, 1981.

NYSSCHEN, J.M. Kommentaar op: Gouws, M. Die onderwys van liggaamlik gestremde kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

INALD, D.R. Group C learning disabled child. Pretoria: Human Sciences Research Council. Investigation into Education. Work Committee: Education for Children with Special Educational Needs, 1981.

PREEZ, J.J. Afaties/linguisties gestremde kind - alle bevolkingsgroepe. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

- DU TOIT, C.J. Die gedeeltematig horende kind. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.
- DU TOIT, J.H. Die jeugoortreder: ortopedagogiese riglyne. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.
- GARBERS, J.G. et al. Minimal brain dysfunction: a perspective of development during the seventies. Paper read during the SAALED Congress (1980).
- GOLDING, M.M. Recommendations for future educational provision for autistic children of all races in the Republic of South Africa. Pretoria: Human Sciences Research Council. Investigation into Education. Work Committee: Education for Children with Special Educational Needs, 1981.
- GOUWS, M. Die onderwys van dowe kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981a.
- GOUWS, M. & NIJSSE, J.M. Die onderwys van blinde kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981b(1).

- GOUWS, M. & NIJSSE, J.M. Die onderwys van swaksiende kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981b(2).
- GOUWS, M. Die onderwys van liggaamlik gestremde kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981c.
- GOUWS, M. & NIJSSE, J.M. Die onderwys van opleibare verstandelik ernstig gestremde kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981d.
- GOUWS, M. Die onderwys van serebraal gestremde kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981e.
- GOUWS, M. Die onderwys van epileptiese kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981f.
- GOUWS, M. Die onderwys van kinders met ernstige spesifieke leergestremdhede. Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981g.

- GOUWS, M. Die onderwys van outistiese kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981i.
- GOUWS, M. & NIJSSE, J.M. Die onderwys van sorgbehoewende pedagogies verwaarloosde kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981j.
- GOUWS, J. Afaties-linguisties gestremde kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981k.
- GOUWS, M. Die onderwys van gedeeltelik horende kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.
- GOUWS, M. Die onderwys van breinbeseerde kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981h.
- GOUWS, M. Die onderwys van doofblinde kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

UWS, M. & NIJSSE, J.M. Die onderwys van onderrigbare verstandelik gestremde kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

UWS, M. Die onderwys van hardhorende kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

RIESEL, A.M.S. Kommentaar op: Gouws, M. & Nijse, J.M. Die onderwys van sorgbehoewende pedagogies verwaarloosde kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

ROBBELAAR, J.J. Die verstandelik gestremde opleibare kind. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

ROVER, V.M. The mentally retarded special care child. Pretoria: Human Sciences Research Council. Investigation into Education. Work Committee: Education for Children with Special Educational Needs, 1981.

ROSBROEK, J.B. & JOOSTE J.H. Die identifisering van hoogbegaafde leerlinge met verwysing na onderwysprogramme in die opleiding van onderwysers. Pretoria: Raad vir Geesteswetenskaplike Navorsing, 1981.

HAMILTON, J.H. Integrasie van onderwysvoorsiening vir leerlinge met spesiale onderwysbehoefte binne die totale onderwysstelsel. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte, 1981.

HAMILTON, J.H. Die ontwerp van riglyne vir die integrering van die onderwysvoorsiening aan leerlinge met spesiale onderwysbehoefte binne die totale onderwysstelsel. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte, 1981.

HEYNS, P.M. Kommentaar op: Gouws, M. & Nijse, J.M. Die onderwys van sorgbehoewende pedagogies verwaarloosde kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

JONKER, J.F.J. Memorandum insake die pedagogies verwaarloosde emosioneel/gedragsafwykende kind. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

KOK, J.C. Jeugoordreders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

KOMITEE VAN ONDERWYSHOOFDE. Inligtingstuk oor die identifisering, prosedure van verwysing, plasing en terugplasing van gestremde leerlinge. Pretoria: 1980 (G.P. - S (80)).

KONFERENSIE VIR SKOOLSIELKUNDIGES (1980). Remediërende onderwys: die organisasie van remediërende hulspanne in skole. Kaapstad: Kaap die Goeie Hoop. Onderwysdepartement, 1980.

- LEARY, P.M. The brain injured child. Pretoria: Human Sciences Research Council]. Investigation into Education. Work Committee: Education for Children with Special Educational Needs, 1981.
- LOWENBERG, E.L. Submission of recommendation regarding language-disabled children. Pretoria: Human Sciences Research Council. Investigation into Education. Work Committee: Education for Children with Special Educational Needs, 1981.
- MACKAY, M. et al. Die begaafde kind in Suid-Afrika: 'n kort geskiedkundige oorsig met aanbevelings ten opsigte van toekomstige navorsing. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir kinders met Spesiale Onderwysbehoefte, 1981.
- MARAIS, D. Kommentaar op: KOH Inligtingstuk oor die identifisering, prosedure van verwysing, plasing en terugplasing van gestremde leerlinge. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.
- MARAIS, H.A. Kommentaar op: Gouws, M. & Nijse, J.M. Die onderwys van opleibare verstandelik ernstig gestremde kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.
- MARAIS, H.A. Kommentaar op: KOH Inligtingstuk oor die identifisering, prosedure van verwysing, plasing en terugplasing van die geestelik vertraagde kind. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

- MARTIN, D.D. Comments on: Gouws, M. Die onderwys van serebraal gestremde kinders. Pretoria: Human Sciences Research Council. Investigation into Education. Work Committee: Education for Children with Special Educational Needs, 1981.
- MARTIN, D.D. The learning disabled child. Pretoria: Human Sciences Research Council. Investigation into Education. Work Committee: Education for Children with Special Educational Needs, 1981.
- MOORE, H. Pedagogies verwaarloosde emosioneel/gedragafwykende kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.
- MOORE, H. Die verstandelik gestremde onderriggbare Blanke kind. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.
- MULLER, A. Die leergestremde/kategorie C-kind: Kommentaar. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.
- MÜLLER, F.J. Verstandelike gestremdheid (opleibare kind). Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.
- NATAL EDUCATION DEPARTMENT. Ad hoc committee appointed to consider the education of gifted children in Natal schools and to make recommendations relating thereto. Report. Pietermaritzburg: 1980.

OLIVIER, B. Verstandelik gestremdheid. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

OP'T HOF, J. Blinde kinders: voorkoming van die gestremdheid by wyse van onder andere voorligting aan ouers en vroegetydige hulpverlening. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

OP'T HOF, J. Dowe kinders: voorkoming van die gestremdheid by wyse van onder andere voorligting aan ouers en vroegetydige hulpverlening. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

OP'T HOF, J. (Genetiese aspekte van gestremdheid.) Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

OP'T HOF, J. Onderrigbare verstandelik gestremde kinders: voorkoming van die gestremdheid by wyse van onder andere voorligting aan ouers en vroegetydige hulpverlening. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

PEACH, P.P. Kommentaar op: KOH Inligtingstuk oor die identifisering, prosedure van verwysing, plasing en terugplasing van gestremde leerlinge. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

POTGIETER, D.S. Kommentaar op: Gouws, M. Die onderwys van kinders met ernstige spesifieke leergestremdhede. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

RAAD VIR GEESTESWETENSKAPLIKE NAVORSING. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys vir Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys. Verslag, deel A: Basisverslag van alle insette ontvang. Pretoria: 1981.

RAAD VIR GEESTESWETENSKAPLIKE NAVORSING. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys. Verslag, deel B: Aanbevelings en toeliggende motivering. Pretoria: 1981.

RAAD VIR GEESTESWETENSKAPLIKE NAVORSING. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys. Verslag, deel C: Sintese en slotaanbevelings. Pretoria: 1981.

RAUBENHEIMER, L.J. Die kind met epilepsie. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

- ROBERTS, C.S. Die sorgbehoewende kind. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoeftes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.
- ROCHER, H.J.W. Die behoefte aan en implementering van skoolmaatskaplike werk: memorandum. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoeftes, 1980.
- ROSSOUW, J.A. Kommentaar op: Gouws, M. Die onderwys van serebraal gestremde kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoeftes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.
- SCHLEBUSH, L. Die psigies ernstige versteurde kind. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoeftes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.
- SINGH, A.K. Mentally retarded trainable child. Pretoria: Human Sciences Research Council. Investigation into Education. Work Committee: Education for Children with Special Educational Needs, 1981.
- SKUY, M. A study of remedial facilities in the private sector of South Africa. Pretoria: Human Sciences Research Council. Investigation into Education. Work Committee: Education for Children with Special Educational Needs, 1981.
- SOCIETY FOR SOCIAL WORKERS (Western Cape). Memorandum From a Work Group of the ... to the HSRC Committee investigating the education system in South Africa. Pretoria: Human Sciences Research Council. Investigation into Education. Work Committee: Education for Children with Special Educational Needs, 1980.

- SONNEKUS, M.C.H. Die skolasties geremde kind. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys vir Skolasties-geremde Kinders, 1981.
- SOUTH AFRICAN NATIONAL COUNCIL FOR CHILD AND FAMILY WELFARE. Principles of education, matters of concern; social work in educational context and pre-school centres. Pretoria: Human Sciences Research Council. Investigation into Education. Work Committee: Education for Children with Special Educational Needs, 1981.
- THE SA SOCIETY FOR COUNSELLING PSYCHOLOGISTS. The need for specialized facilities for socially and emotionally maladjusted children: recommendations. Pretoria: Human Sciences Research Council. Investigation into Education. Work Committee: Education for Children with Special Educational Needs, 1980.
- SPIEGEL, M. et al. Memorandum on art therapy: South Africa. Pretoria: Human Sciences Research Council. Investigation into Education. Work Committee: Education for Children with Special Educational Needs, 1981.
- STEENKAMP, E. n Opvoedkundige program vir verstandelik erg gestremde kinders in inrigtings. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.
- STEENKAMP, W.L. Kommentaar op: Gouws, M. Die onderwys van kinders met ernstige spesifieke leergestremdhede. Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

STEHLI, A. (Optometry in remedial education) Pretoria: Human Sciences Research Council. Investigation into Education. Work Committee: Education for Children with Special Educational Needs, 1981.

SUID-AFRIKA (Republiek). Departement van Binnelandse Aangeleenthede. Kleurlingsake: Buitengewone Onderwys. (Inligtingstuk.) Pretoria: 1981.

SUID-AFRIKA (Republiek) Departement van Gesondheid, Welsyn en Pensioene. Die hantering van gehoorgestremde kinders in Suid-Afrika. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

SUID-AFRIKA (Republiek). Departement van Gesondheid, Welsyn en Pensioene. (Inligtingstuk.) Pretoria: 1981.

SUID-AFRIKA (Republiek) Departement van Indiërsake. Jaarverslag 1979. Pretoria: 1980.

SUID-AFRIKA (Republiek) Departement van Kleurlingsake. Jaarverslae.

SUID-AFRIKA (Republiek) Departement van Onderwys en Opleiding. Afdeling Buitengewone Onderwys. Die onderwys van geestesvertraagdes. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

SUID-AFRIKA (Republiek) Kinderwet, no. 33 van 1966.

SUID-AFRIKA (Republiek) Komitee van Onderzoek na die Opvoeding van Kinders met Minimale Breindisfunksie. Verslag. Pretoria: 1969: Voorsitter C.H. de C. Murray.

SUID-AFRIKA (Republiek). Wet op Buitengewone Onderwys vir Swartes, no. 14 van 1964.

SUID-AFRIKA (Republiek). Wet op Geestesgesondheid, no. 18 van 1973.

SUID-AFRIKA (Republiek). Wet op Onderwys en Opleiding, no. 90 van 1979.

SUID-AFRIKA (Republiek). Wet op Onderwys vir Indiërs, no. 61 van 1965.

SUID-AFRIKA (Republiek). Wet op Onderwys vir Kleurlinge, no. 47 van 1963.

SUID-AFRIKA (Republiek). Wet op Onderwysdienste, no. 41 van 1967.

SUID-AFRIKA (Republiek). Wet op Opleiding van Geestelike Vertraagde Kinders, no. 63 van 1974.

SUID-AFRIKAANSE AKADEMIE VIR WETENSKAP EN KUNS. Kommissie van Onderwys. Memorandum insake die begaafde kind. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. 1980.

THERON, C.D. Kommentaar op: Gouws, M. Die onderwys van liggaamlik gestremde kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

URBANI, G. Die belewingsproblematiek rondom kinders met genetiese gestremdhede. Pretoria: Raad vir Geesteswetenskaplike navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

URBANI, G. Posoms krywings, opleiding en voorsiening van professionele personeel betrokke by die onderwys en hulpverlening aan kinders met spesiale onderwysbehoefte. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. 1981.

- URBANI, G. & OVERBEEK, C. Overbetrokkenheid by die onderwys van gestremde en geremde kinders: opsomming van konsepverslag. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Onderwys vir Kinders met Spesiale Onderwysbehoefte, 1981.
- UYS, I.C. Die afaties-/linguistiesgestremde kind. Pretoria; Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.
- VAN DER MERWE, H.W.S. Kategorie C-kind: enkele opmerkinge: Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.
- VAN DER POEL, J. Kommentaar op: Gouws, M. & Nijse, J.M. Die onderwys van blinde kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.
- VAN DEVENTER, H.J.L. Kinderwetskole: behoeftestelling en aanbevelings ten opsigte van toekomstige onderwysvoorsiening (aan sorgbehoewende pedagogies verwaarloosde kinders). Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys vir Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.
- VAN DYK, N.F. Die opleiding van die geestelik vertraagde kind. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

VAN NIEKERK, C. et al. Education for sensory, neurally and mentally handicapped and pedagogically deprived or behaviour deviant pupils: occurrence and projections of number of pupils. Pretoria: Human Sciences Research Council. Investigation into Education. Work Committee: Financing of Education, Work Committee: Demography, Education and Welfare. Sub-Committee: Education of the Handicapped Child Outside the Mainstream of Normal Education in the RSA, 1980. (004/3)(0011/2)008/1).

VAN NIEKERK, C. et al. Onderwys vir sintuiglik-, neuraal, verstandelik-gestremde en pedagogies verwaarloosde of gedragsafwykende leerlinge: voorkoms en projeksies van leerlingtalle. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwysfinansiering. Werkkomitee: Demografie, Onderwys en Mannekrag. Sub-komitee: Onderwys van die Gestremde Kind buite die Hoofstroom van Gewone onderwys in die RSA, 1980 (004/3)(0011/2)008/1).

VAN NIEKERK, P.A. et al. Onderwysvoorsiening vir skolasities-geremde kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys vir Skolasities-geremde Kinders, 1981.

VAN ROOYEN, M. Kinderoutisme. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Gewone Onderwys, 1981.

VAUGHAN, T. van B. Die onderwys van onderrigbare verstandelik gestremde kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoefte. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

VERMEULEN, H.J. Die kategorie C-kind: kommentaar. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoeftes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

WILLIAMS, B.K. Kommentaar op: Gouws, M. Die onderwys van dowe kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoeftes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

WILLIAMS, B.K. Kommentaar op: Gouws, M. Die onderwys van gedeeltelik horende kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoeftes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

WILLIAMS, B.K. Kommentaar op: Gouws, M. Die onderwys van hardhorende kinders. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoeftes. Subkomitee: Onderwys van Gestremde Kinders Buite die Hoofstroom van die Gewone Onderwys, 1981.

ZAAIMAN, L. Insidensie en huidige onderwysvoorsiening aan skolasties-geremde kinders binne die hoofstroom van die onderwys en ondersoek van remediërende hulp verleen deur staatsondersteunde instansies. Pretoria: Raad vir Geesteswetenskaplike Navorsing. Onderzoek na die Onderwys. Werkkomitee: Onderwys vir Kinders met Spesiale Onderwysbehoeftes. Subkomitee: Onderwys vir Skolasties-geremde Kinders, 1981.

APPENDIX

SUBMISSIONS AND/OR FEED BACKS WERE RECEIVED FROM THE FOLLOWING PERSONS/BODIES

Dr J. Anderson, Red Cross Hospital, Cape Town
Dr L.G. Arens, Vista Nova School, Cape Town
Prof. M.L. Aron, University of the Witwatersrand, Johannesburg
Mr E.R. Barker, Paarl School, Brackenfell, Cape Town
Mr J.P. Bekker, Department of Internal Affairs (Coloured Affairs), Cape Town
Dr S. Biesheuvel, University of the Witwatersrand, Johannesburg
Mr H.C. Boshoff, Cape Receife School, Port Elizabeth
Prof. T.R. Botha, RAU, Johannesburg
Dr V. Bührmann, Red Cross Hospital, Cape Town
Mr C.P. Cilliers, Education Department of the OFS, Bloemfontein
Dr C. de M. Cloete, Natal Education Department, Pietermaritzburg
Dr J.M. de Nysschen, Elizabeth Conradie School, Kimberley
Director General, Department of Health, Welfare and Pensions, Pretoria
Director General, Department of Education and Training, Pretoria
Mr D.R. Donald, University of Cape Town, Cape Town
Mr J.J. du Preez, University of Stellenbosch, Stellenbosch
Prof. C.J. du Toit, Tygerberg Hospital, Cape Town
Mr J.H. du Toit, Tygerberg Hospital, Cape Town
Mrs M.M. Golding, New Hope School, Pretoria
Mr M. Gouws, HSRC, Pretoria
Dr A.M.S. Griessel, Petra School for Girls, Oudtshoorn
Mr J.J. Grobbelaar, Department of National Education, Pretoria
Prof. V.M. Grover, Alexandra Centra, Cape Town
Dr J.H. Hamilton, School for the Deaf, Worcester
Dr P.M. Heyns, RAU, Johannesburg
Dr J.F.J. Jonker, Natal Education Department, Pietermaritzburg

Prof. J.A. Kapp, UNISA, Pretoria
 Prof. J.C. Kok, RAU, Johannesburg
 Dr P.M. Leary, Red Cross Hospital, Cape Town
 Mr W.B. Lloyd, Department of Internal Affairs (Indian Affairs) Durban
 Dr E.L. Lowenberg, Counselling Psychologist, Durban
 Mr M. Mackay, NIPR, Johannesburg
 Mr D. Marais, Prinshof School, Pretoria
 Mrs H.A. Marais, Jannie Brink Training Centre, Kimberley
 Mr D.D. Martin, Vista Nova School, Cape Town
 Dr H.A. Mocke, Department of Education and Training, Pretoria
 Dr H. Moore, TED, Pretoria
 Mr A. Muller, Cape Receife School, Port Elizabeth
 Dr F.J. Müller, Department of Education, SWA, Windhoek
 Prof. C. de H. Murray, UNISA, Pretoria
 Dr A.S. Olivier, TED, Pretoria
 Mr B. Olivier, Department of Education, Cape Town
 Dr J. Op't Hof, Department of Health, Welfare and Pensions, Pretoria
 Mr P.P. Peach, Prinshof School, Pretoria
 Mr D.S. Potgieter, New Hope School, Pretoria
 Dr L.J. Raubenheimer, Jan Kriel School, Kuilsriver
 Dr C.J.J. Reyneke, Department of Education, Cape Province
 Prof. J.H. Robbertze, MEDUNSA, Pretoria
 Mr C.S. Roberts, J.W. Luckhoff School, Heidelberg
 Dr H.J.W. Rocher, University of Durban-Westville, Durban
 Dr J.A. Rossouw, Muriel Brand School, Brakpan
 Director, S.A. National Council for Child and Family Welfare, Johannesburg
 S.A. Society for Counselling Psychologists (Natal Branch), Durban
 Dr L. Schiebusch, Addington Hospital, Durban
 Mr A.K. Singh, Department of Internal Affairs (Indian Affairs), Durban

Dr M. Skuy, University of the Witwatersrand, Johannesburg
Chairman, Society for Social Workers (Western Cape), Cape Town
Prof. M.C.H. Sonnekus, University of Pretoria, Pretoria
Mrs M. Spiegel, Artstherapist, Cape Town
Prof. G. Stander, Kommissie van Onderwys, S.A. Akademie vir Wetenskap en
Kuns, Stellenbosch
Mrs E. Steenkamp, Alta du Toit Centre, Cape Town
Prof. W.L. Steenkamp, University of Western Cape, Bellville
Mr A. Stehli, Optometrist, Somerset West
Mr C.D. Theron, Department of National Education, Pretoria
Dr. G. Urbani, HSRC, Pretoria
Dr. I.C. Uys, University of Pretoria, Pretoria
Mr H.W.S. van der Merwe, Cape Receife School, Port Elizabeth
Mr J. van der Poel, School for the Blind (Coloureds), Worcester
Dr H.J.L. van Deventer, Department of National Education, Pretoria
Mr N.F. van Dyk, Department of National Education, Pretoria
Mr C. van Niekerk, HSRC, Pretoria
Prof. P.A. van Niekerk, University of Pretoria, Pretoria
Mr van Rooyen, Vera School, Cape Town
Prof. T. van B. Vaughan, UNISA, Pretoria
Mr H.J. Vermeulen, Cape Receife School, Port Elizabeth
Miss B.K. Williams, Cape Education Department, Cape Town
Dr L. Zaaiman, Pretoriase Onderwyskollege, Pretoria.

Master no. 2381

Dobos no. 2383