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Education for the black disabled

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Report of the Work Committee: Education for the black
disabled of the HSRC Education Research Programme

The HSRC Education Research Programme is organizationally and administratively linked to the Institute for Educational Research of the Human Sciences Research Council

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Co-ordinator: Ms A.C. Bouwer BA (Hons), M.Ed., T.H.E.D.
Executive Director: Dr S.W.H. Engelbrecht

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Printed and published by the HSRC
134 Pretorius Street, Pretoria

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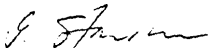
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FOREWORD

The Work Committee: Education for the black disabled took as their point of departure the real needs of impaired black children, estimated to be three quarters of a million by 1990. The committee was brought face to face not only with the reality of the figures, but also with the complexity and severity of the problems inherent in specialized education for blacks in the RSA. This has in a special way directed us once more to the consideration of controversial issues such as categorizing and labelling from practical necessity, as well as the debate with regard to mainstream education versus specialized education. As it was necessary to be constantly mindful of cost effectiveness and economic feasibility, the committee faced the challenge of conceptualizing and addressing the diversity of needs in real terms. We were at times strongly tempted to follow the easy way of organizing the field according to existing white structures. However, the multi-ethnic nature of the question, the mosaic of languages and the vast number of agents involved in specialized education for blacks (and, per implication, mental health), soon sensitized the committee to keep the particular sociocultural nuances in constant consideration.

The agents involved with the impaired black child in fact range from the traditional African healer, who is to this day an influential factor, to academic perceptions of the requirements in the field. An awareness of socio-cultural context and the real priorities and aspirations cherished by blacks as opposed to typical Western projections were strongly in evidence during the subsequent conferences held with the black community, and these considerations will have to be respected. Specialized education for blacks is a complex, profound, wide-ranging and multifarious problem that holds a challenge for creative solutions. This is possible, provided that we are able on the one hand to reconcile long-established perceptions of the whites with the views of blacks, and on the other to give the highest priority to comprehensiveness, cost effectiveness and a directed multiprofessional approach.



CHAIRMAN

PROF. G. STANDER

CHAPTER 1

INTRODUCTION AND ORIENTATION WITH REGARD TO THE RESEARCH PROJECT: EDUCATION FOR THE BLACK DISABLED

1.1 INTRODUCTION

The contribution of the HSRC and the Department of Education and Training to 1986 as the Year of Disabled People entailed a comprehensive research investigation into education for the black disabled in the RSA. The research was undertaken because of the great need for extended development of educational facilities, which exists despite the special efforts being made at present to provide adequate and effective education for black impaired children, and also despite the large scale expansion and improvement of educational provision for the impaired that has taken place during recent years.

The Work Committee : Education for the black disabled was constituted as follows:

- | | |
|---------------------------------------|---|
| Prof. G. Stander (Chairman) | - Professor emeritus, University of Stellenbosch |
| Dr S.W.H. Engelbrecht (Vice-chairman) | - Executive Director, IER, HSRC |
| Miss A.C. Bouwer (Co-ordinator) | - Senior Research Specialist, IER, HSRC |
| Dr E. Alant | - Chief therapist, Department of Speech Pathology and Audiology, University of Pretoria |
| Mr J.J. Bornman | - Assistant Director, Department of Education and Training |
| Mrs J.T. Buku | - Principal, Thembalethu Primary School |
| Miss E.N. Chinkanda | - Chief Researcher, ISODEM, HSRC |
| Dr J.H. Hamilton | - Principal, De la Bat School for the Deaf |
| Dr J.F.J. Hattingh | - Director : Social Welfare, Department of National Health and Population Development |

Mrs H.A. Mabotja	Principal, Pumla Training Centre
Mrs R. Machobane	Secretary, Transvaal Associa- tion for Blind Black Adults
Mrs P.C.M. Mkalipe	Chief Researcher, NIPR, HSRC
Mr R.L. Ngcobo	Rector, Indumiso College of Education
Mrs C. Sithole	Director, Department of Com- munity Development, Diepmeadow City Council, Johannesburg
Prof. M. Skuy	Head, Department of Specia- lized Education, University of the Witwatersrand
Mrs M.T. Thwala	Principal, Tenteleni Primary School
Prof. T.V.B. Vaughan	Faculty of Education, Vista University
Mr L. Vitus	Chairman, S A Federal Council for the Rehabilitation of Disabled People

The work committee held six meetings, namely on

29 April 1986
 29 May 1986
 8 August 1986
 3 September 1986
 25 February 1987
 30 October 1987

1.2 PROBLEM STATEMENT

The research problem requiring investigation could be formulated as follows:

- What are the urgent needs and problems existing with regard to education for the impaired black person in the RSA?
- How could adequate and effective education for impaired blacks best be provided in the RSA?

1.3 COMPONENTS OF THE RESEARCH INVESTIGATION

The comprehensive research investigation comprised the following four research components:

1.3.1 Research projects

The Work Committee: Education for the black disabled decided on the following eight projects and appointed a project committee for each as indicated:

- (1) Definition and description of the categories of impairment warranting special measures in education.

Project leader: Prof. H.M. Gerber
 Researchers: Dr L. du Toit
 Mr P.N. Botha
 Mrs A.M. Smith
 Mr A. Levitz

- (2) The philosophy of education for the impaired with special reference to the black child.

Project leader: Prof. W.L. Steenkamp
 Researchers: Prof. J.J. du Preez
 Dr J.H. Hamilton
 Prof. T.V.B. Vaughan

- (3) Incidence of the various categories of impairments among black children.

Project leader: Prof. J.W.M. Pretorius
 Researchers: Dr H.M. Prinsloo

(4) Current provision and situation in schools for impaired black children.

Project leader: Dr A.S. Olivier

(5) Identification, evaluation and diagnosis of impaired children.

Project leader: Prof. M. Skuy

Researchers: Dr M. Westaway

Mrs C. Perold

Ms N. Makaula

(6) Vocational subject objectives with a view to work placement of impaired black persons.

Project leader: Dr H.J.T. Steyn

Researchers: Mrs B. Ras

Dr H.J. Vermeulen

Dr H.G. Smuts

Dr D.J.P. Jacobs

Prof. T. Park

Mrs E.J.C. Snyman

Mr L. Webb

Mr D. Marais

Mr P.J. du Plessis

(7) Non-formal and/or informal education for impaired black persons younger than 21.

Project leader: Mr A.J. Murray

Researcher: Mrs W. van Tonder

(8) The present and future role of mass media (especially television) in education for the impaired black child.

Project leader: Prof. G. Stander

Researcher: Mr De Wet Schutte

The eight research reports of these project committees have been summarized in this final report with the emphasis on findings and recommendations (Chapters 2-9).

1.3.2 Conferences

A series of three conferences on education for impaired blacks was presented at the following places and times:

Durban	25-26 March 1987
Port Elizabeth	27-28 March 1987
Pretoria	30-31 March 1987

The organizing committee stated the following objectives for the conferences:

- Involvement: Individuals involved with education for impaired black children should feel part of the investigation.
- Reaction: Findings should be presented and reaction should be discussed.
- A nationwide awareness of the research should be created among all practitioners (individuals as well as organizations).
- The needs and viewpoints stated at the conferences should be incorporated in the final report.

The conferences were therefore regarded as an integral part of the research process. Direct consultation with the black community as well as other individuals and organizations involved in the field was a necessary contribution towards the comprehensiveness and reliability of the research findings.

Themes and speakers at the conferences were the following:

- Definition and description of the categories of impairment. Miss E. Chinkanda - HSRC
- The philosophy of education for the impaired, with special reference to the black child. Prof. W.L. Steenkamp - University of the Western Cape
- Incidence of the various categories of impairment among black children. Prof. J.W.M. Pretorius - University of Pretoria
- Current provision and situation in schools for impaired black children. Mrs C.M. Sithole - Diepmeadow City Council, Johannesburg
- Identification, evaluation and diagnosis of impaired black children. Prof. M. Skuy - University of the Witwatersrand
- Vocational subject objectives with a view to work placement of impaired black persons. Mr R.L. Ngcobo - Department of Education and Training
- Non-formal and/or informal education for impaired black youths under the age of 21. Mrs R. Machobane - Association for Blind Black Adults
- The present and future role of mass media (especially television) in education for the impaired black child. Prof. G. Stander - University of Stellenbosch

Feedback was obtained in three ways during the conferences:

- panel discussions
- group discussions and reporting
- individual questionnaires

For the purpose of the abovementioned panel discussions, a local panel was selected for each conference to represent the following groups:

- schools
- auxiliary services
- the impaired/parents of the impaired
- lecturers at academic and teacher training institutions

Feedback obtained from the conferences has been included in this report, including data obtained by means of the individual questionnaires (Chapter 10).

1.3.3 Individual questionnaires

Everybody attending the conferences was requested to complete an individual questionnaire on education for impaired blacks before and after each conference. The purpose was to gather data on the perceptions regarding education for impaired blacks entertained by individuals involved in the field. By having the questionnaire filled in again at the conclusion of the conference, any changes in individuals' perceptions resulting from the presentations and discussions at the conference could be determined. In order to obtain data on the views held by mainstream educationalists concerning education for the impaired, persons attending two conferences of TUATA in April 1987 were also requested to complete the questionnaires. A copy of the questionnaire has been appended (Appendix A).

1.3.4 Final, summative report

This report, compiled by Prof. J.W.M. Pretorius, serves as a final, summative report in which it has been attempted to summarize the findings and recommendations resulting from the eight research reports, from inputs obtained during the conferences and from the data of the individual questionnaires. A synoptic view of the findings and recommendations derived from the research investigation in its totality concludes this report (Chapter 11).

CHAPTER 2

THE PHILOSOPHY OF EDUCATION FOR THE IMPAIRED, WITH SPECIAL REFERENCE TO THE BLACK CHILD (Project No. 2)

2.1 FORMULATION AND INTERPRETATION OF ASSIGNMENT

This committee had to formulate a fundamental philosophy and guidelines for education, rehabilitation and guidance for the impaired, with special reference to the particular circumstances of the impaired black in the RSA. A reality-based, educational-philosophical approach was required, with consideration for the needs of the black community.

A fundamental philosophy (with a particular view of man and the impaired person) forms the basis in planning and implementing educational provision for the impaired.

It is expected that practical suggestions or models will ensue from this investigation.

The project committee premised that there should be a progression from a general philosophy of education (first order philosophy) to a more specific philosophy with regard to the impaired black child (second order philosophy). A third order philosophy would then comprise recommendations and implications concerning practical implementation with regard to impaired blacks.

2.2 ORIENTATION

Compared to educational provision for the impaired white in the RSA, education and training for the impaired black have fallen far behind owing to socio-political-historical events and views.

This is an important fact in view of the current trend to strive after equal educational opportunities for every citizen in the country. Upgrading education for the impaired black child does not necessarily imply a mere duplication of the educational facilities available to

impaired whites, but rather planning in accordance with the needs of the impaired black person.

2.3 PROBLEM STATEMENT

2.3.1 General

The question is whether one should look at the impaired only in the school situation, or whether intervention of any nature should not necessarily take place with consideration of the impaired person's total lifespan.

2.3.2 Specific

Another question regards the extent to which fixed practical guidelines should be expected to emerge from the philosophy, e.g. educational and training models.

2.4 RELEVANCE OF THE INVESTIGATION

It has become a matter of interest to the RSA to implement the principle of equal educational opportunities, also for impaired black persons, as soon as possible.

Any scientific planning of educational provision for the impaired should be based on an implicit or even articulated philosophical view of the broad educational situation and more specifically of the impaired person. Although this investigation concerns impaired blacks in particular, both shared and unique aspects of the religious and cultural lifestyles as well as the various languages of the total South African population will have to be taken into account. In addition, the interactional and practical implications for the education, habilitation and rehabilitation of rural, urban and developing persons should be considered (Steenkamp et al. 1986 : 6).

If fundamental reflection on a variety of impaired persons (differing in nature and degree of impairment) from a diversity of communities (with

regard to language, ethos and living conditions) were based simply on a Western, middle class philosophy of life, it would pose a certain danger. The resultant ideas may be inapplicable (e.g. making expensive and sophisticated, but impractical or unacceptable forms of provision) not only with regard to the educational situation, but also with regard to intervention for the impaired and counselling for the parents from the cradle to the grave.

The fact that the entire issue of education for black South Africans is a sensitive sociopolitical one, should also be borne in mind. It is possible that any provision for impaired black persons made by the State, however philosophically and practically justifiable and however well intended, may be regarded with suspicion by some groups of the population, especially in the black community (Steenkamp et al. 1986 : 6-7).

2.5 PREMISES

It is pointed out that such matters as the present and future educational dispensation, basic educational principles, the White Paper on educational provision in the RSA, "environmental impairment" or "cultural otherness" and the multilingual situation of the target population should be borne in mind.

The various categories and degrees of impairment (or persons requiring specialized education) should not be the only consideration. Furthermore, the philosophy should not be limited to the impaired child of school-going age. In order to offer most effective intervention the impaired preschool child and postschool adult cannot be approached from a contrasting view of man or with different objectives in mind. Therefore, the committee believes that the provision of guidance and intervention for the impaired and their families should be a continuous and interlinking process. This necessarily implies that disciplines other than education should also be involved in a holistic approach.

It is also believed that, although the White Paper is a guide to be followed, it should, against the background of the HSRC report and the

full commentary of the Government, be examined critically especially in the light of changing circumstances (Steenkamp et al. 1986 : 7).

2.6 AIMS OF THE INVESTIGATION

Primary aim: To outline a philosophy of education for the impaired, in particular the impaired black child.

Secondary aim: To contemplate the best methods of guidance, intervention, education and habilitation of impaired black people, accepting their full human worth.

Tertiary aim: To consider, in the light of available information and experience, various forms of provision and practical models for education and training, as well as further research required for sound implementation of the fundamental guidelines.

2.7 BROAD RESEARCH STRATEGY

An empirical investigation was not possible during this phase of the research. It was consequently decided to conduct a literature study supplemented by discussions and correspondence with experts (with regard to the theory and practice of assistance to the impaired, in particular impaired blacks, or with a knowledge of developing countries) and other individuals involved with the impaired (especially with regard to education for impaired blacks). It was hoped to arrive at a synthesis by means of group discussions, reflection, progressive evaluation and the verification of ideas, after which an attempt would be made to find the guidelines for practical applications from the theory, with reference to personal experience and additional semistructured interviews (Steenkamp et al. 1986 : 8). A number of the findings were subsequently dealt with in the questionnaire completed at the conferences, in order to determine the opinions of persons involved in education for the impaired.

2.8 DATA CREATION METHOD

Literature study, semistructured interviews, correspondence with experts and "think tank" group discussions.

2.9 MAIN RESEARCH INSTRUMENTS

Literature, experience, enquiry and interpersonal exchange of ideas.

2.10 FUNDAMENTAL GUIDELINES AND BASIS FOR SPECIALIZED EDUCATION, WITH PARTICULAR REFERENCE TO THE IMPAIRED BLACK CHILD

The following is a brief discussion of each of the five main conclusions of the project, including the recommendations and implications as reported (Steenkamp et al. 1986 : 10-18).

2.10.1 Finding 1

There is no need for a separate philosophy for the education of impaired black children. The philosophical principles directing the policy of education for unimpaired children are as relevant for education for the impaired.

(1) Discussion

Within any community an educational philosophy will always bear relation to the existing mores and political attitudes. In practice this will have an effect on the system of education. The prevailing economic and social factors also affect the philosophy and practice of education. This fact holds equally true for mainstream and specialized education.

(2) Recommendation

The philosophical principles underlying mainstream education should be reviewed to determine how they are in practice to be applied to education for impaired black children.

(3) Implication

Every educational principle should be considered in the light of the special needs of the particular group of children.

2.10.2 Finding 2

All children, including the impaired, are entitled to equal educational opportunities. Any form of discrimination based on race, culture, language, creed, sex, impairment or social status is unacceptable.

(1) Discussion

Fundamental to this conclusion lies the democratic premise that all human beings are basically equal. Every individual has a right to opportunities for the full development of his physical, psychological and spiritual potential; a right to respect for his human dignity; a right to the satisfaction of his basic needs, including his social and occupational needs; a right to be accepted in the community. It is the responsibility of the community (parents and the State) to provide adequate education for all children and youths in order to realize this ideal to the fullest extent possible. No one should be subjected to inferior treatment just because he happens to be less gifted than others. On the contrary, special care should be taken of the less fortunate individual. At the very least he should be treated as equal to any other person, as far as his civil rights are concerned; his individuality should be respected; he should be granted the opportunity to overcome his impairment and to develop his innate potential; he should never be scorned or pushed aside. It is not necessarily implied that all children should receive identical education, since the needs of individual children would not be met if that were the case. It is of the utmost importance, however, that differentiation in education (wherever it is applied) should be viewed by parents, children and the community in general as being in the best interest of the child (children) concerned.

(2) Recommendations

- The government should assume primary responsibility for the provision of education for impaired black children.

- Educational objectives concerning impaired black children should be the same as those concerning the unimpaired, namely: development of potential, promotion of a positive self-esteem and preparation (where possible) for independent and productive participation in the community as an adult. No child should be labelled "uneducable".

- In accordance with their civic rights impaired blacks (children as well as adults) should have "as normal and non-stigmatizing a setting as possible" (Catterall 1978:18). The objective therefore is, wherever possible, to move away from the institutionalization and isolation of the impaired.

(3) Implications

No impaired person should have to forego optimum education as a result of poverty. The impaired are entitled to free services, funded by the State (or possibly by private organizations). There are additional (practical) considerations, for example the ready influence that criminal elements have on the intellectually impaired. Here, the responsibility of the State and the parents should be clearly defined. Provision should be made for differences of opinion between the parents and the State and there should be a procedure for the State to follow when parents prove to be incapable of making well-informed, responsible decisions.

There is also an urgent need for premises and buildings, facilities, equipment and trained personnel. All of these involve considerable financial expense, whereas the funds available are not unlimited. The question arises as to whether "equality" in education would imply equal per capita expenditure for impaired and unimpaired children, or whether a larger amount should be spent on education for the impaired in the attempt to realize the ideal of providing equal educational opportunities for them.

The development of the impaired child's potential is more readily accomplished through early identification and correct placement. This, in turn, calls for proper assessment procedures and a high degree of community involvement. The preparation for adulthood may include some

form of vocational training, or may be limited to personal care and social skills. In both cases successful integration with the community will depend on the level of the community's understanding of, and involvement with, the impaired.

Keeping the impaired person's existence as "normal" as possible calls for a flexible system, admission into mainstream education for at least some of the children, the co-operation of the community and provision of the necessary facilities during childhood as well as adulthood.

2.10.3 Finding 3

In the case of all children (including the impaired), education is directed at the child in his totality. As an individual, the child is a physical, psychological and spiritual "gestalt". His total existence within the context of space (family, social and physical environment) and time (his lifespan, past, present, future) should be taken into consideration.

(1) Discussion

Over-accentuating an isolated aspect of the person's total being (e.g. his intellectual skills) can stunt his overall development. No aspect of his being may be overlooked. Attention should be given to fulfilling the physical, psychological and spiritual needs of the individual.

In addition, the individual should be granted the opportunity to develop his potential to the full through meaningful interaction with his world. The child establishes and expands his relationships with the physical and social world through the experiences accessible to him within his particular environment. The fact that past experiences, present condition and future potential add up to the totality of the individual, needs to be recognized by education.

(2) Recommendations

- Education for impaired black children should make adequate provision for their physical, psychological and spiritual needs.
- Educational planning should take the physical and sociocultural environment of the impaired child into account.
- Educational planning should take the total lifespan of the impaired person into account.

(3) Implications

The conclusions and recommendations stated above have obvious financial implications. A single authority or department should co-ordinate all the services for the impaired, including a central data base. The assessment of impaired children should be performed by a multidisciplinary team. Decisions concerning educational placement should involve medical, psychological and other specialists, teachers, the parents and the child himself. This points to a need for the establishment of diagnostic centres.

The rights and protection of the impaired with regard to their sexual needs require further attention.

Decisions concerning educational placement and the provision of educational facilities should be made with consideration for the home environment of the child, e.g. the degree of stimulation or possible restrictive conditions that he experiences. The impaired person is entitled to an educational environment which would be the least restrictive with regard to his educational needs. It is the responsibility of the educational authorities to provide adequate facilities such as adapted buildings, equipment, et cetera.

Education of the impaired should comply with the norms of the community. To encourage a more positive attitude and greater involvement, the community itself should also be educated concerning the needs of

the impaired. Involvement of the impaired person's family is of vital importance. The aspirations, rights and opinions of the parents should be taken into account. Parents especially need guidance and support with regard to rearing an impaired child.

Poverty and consequent environmental deprivation may cause the resources to be limited in the family or community. The solution here lies in upgrading the community. Environmental deprivation could be a complicating factor with regard to a particular impairment, or it could be the cause of the impairment. The needs of the numerous children who find themselves in the latter category will have to be weighed against the more costly educational needs of the comparatively few severely impaired children. When it comes to equalizing educational opportunities, the child with an environmental impairment has greater needs than the child living in a favourable environment.

The mother tongue of the impaired child is another important aspect of his environment. In many cases a choice will have to be made between less sophisticated care in a mother tongue environment, or better facilities in a centre where the language is foreign to the child. The pros and cons of a uniform academic language for all impaired children should be considered.

Other relevant problems pertaining to the treatment of the impaired child and expectations regarding his future level of performance, concern the differences existing in cultural norms as well as between urban and rural environments.

Early identification and intervention are necessary with regard to the impaired preschool child. Preschool facilities and parental guidance with regard to the identification and treatment of the various impairments should be provided by the educational authorities.

On reaching physical maturity and/or his maximum learning potential, it may be that the impaired person is not yet capable of functioning in the adult world without assistance. The future adult environment of the impaired pupil should therefore be taken into consideration.

Through careful planning, provision should be made for his vocational, social and recreational needs and eventually also for his old age, which may have to include, for example, residential facilities. Amidst fast changing circumstances such planning is a complex task. In view of possible political, social and educational changes, flexibility should be emphasized in any new educational policy so that it could be reviewed as and when necessary in future.

2.10.4 Finding 4

The education of all children, including that of the impaired, should respect the individuality of every child and should take place in the least restrictive environment.

(1) Discussion

It is a fundamental educational principle that every child is a unique individual and his existence as such is more important than any attribute that can be brought to bear to categorize him. On occasion, classification is of practical value but it should never result in individual differences being ignored.

(2) Recommendation

The educational assessment, placement and treatment of impaired black children should take into account their individual needs and circumstances.

(3) Implications

No impaired child should be classified or labelled in terms of his impairment or in any other way. He may, however, be identified as "a child with special educational needs" of a particular kind.

Provision should be made for regular re-appraisal of the child's needs with a view to adjusting his placement within the specialized education system. The education of the child with special educational needs is the chief concern and not the education system (HSRC Report 1981).

A wide variety of educational options should be available to the impaired. Individualized programmes for impaired children should be compiled according to level of development and particular needs. These programmes should be monitored regularly and adapted where necessary.

2.10.5 Finding 5

The education of all children, including the impaired, should maintain a balance between freedom and restrictions.

(1) Discussion

The freedom to make existential choices lies within the nature of man, and by making a choice, he confirms the essence of his human existence. The educator should guide the child in the application of this freedom. Too much freedom, however, could give rise to fear and might cause a child to feel threatened. The educator should set limits within which the child could feel free to develop, and he should encourage choices in accordance with the child's abilities. The impaired child differs from the unimpaired child in that he is accustomed to less freedom and is inclined to feel more threatened by choices.

(2) Recommendations

- The education of the impaired black child should attempt to minimize the restrictive effect of his impairment.
- The impaired child should be actively encouraged to use all the freedom available to him.
- There should be set limits defining the child's areas of choice for him.

(3) Implications

There is a clear need for training and equipment to reduce the physical, psychological and social restrictions resulting from the various impairments. Teachers and parents should be aware of their responsibility to create opportunities for the impaired child to make choices,

and to motivate the child to use those opportunities. Overdependence should be discouraged in a tactful way. Sympathy and consideration should not interfere with the setting of clear guidelines for acceptable conduct.

2.10.6 Summary of conclusions

Steenkamp et al. (1986 : 8-9) summarize the preceding guidelines and fundamentals as follows:

- All humans, therefore also the impaired, are fundamentally equal despite their qualitative otherness. All have a right to live and a right to decent treatment and optimum opportunities for personal development.
- Impaired persons are rightfully different and cannot be regarded or treated as a homogeneous group.
- Discrimination on account of race, culture, language, creed, sex, impairment and social status is educationally wrong in every respect.
- As a person, the impaired should be respected for his individuality, irrespective of who or what he is. The emphasis should be on the person with an impairment, and not on the impaired person. It follows that this person has a right to be acknowledged, respected and cared for.
- The education of the impaired person should be directed at his total being and his relations with his fellowman and his world.
- The family of the impaired person forms an integral part of the situation in which he is raised and educated.
- The education and habilitation of the person with an impairment should take place in the least restrictive environment, enabling him to lead the most normal life possible.

- The fundamental needs and aspirations of the impaired are the same as those of an unimpaired person and a positive self-esteem is of cardinal importance.
- The impaired person has a right to an equal chance for development and to equal civil and job opportunities.
- Like any other person, the impaired has a right to make responsible choices and on account of his limitations he is entitled to special guidance in order to make the best choices considering the larger world in which he lives.

2.11 FINAL PERSPECTIVE

2.11.1 Possible shortcomings and problems (Steenkamp et al. 1986 : 19)

The project committee is aware of the fact that its members represent but one of the wide spectrum of communities in the RSA and that, in spite of all conscious attempts to maintain objectivity, the investigation and findings may have been influenced implicitly or explicitly by their own system of values. The focus on the black child with special educational needs has indicated clearly that planning educational provision for impaired children - with due attention to their own background, community, culture and needs - would require a penetrating review of existing education systems and also consideration of alternative approaches, content and education structures.

The committee therefore strongly recommends that various members and leaders of the black community (experts as well as laymen) be requested to comment on the philosophical principles, conclusions, recommendations and models for educational provision contained in this report.* Poorly educated people in rural areas are not always aware of the impaired person's potential or the habilitation possibilities that already exist or can be created for him. The matter is further compli-

* This recommendation has already been carried into effect by means of the conferences and questionnaire, as explained in 1.3.2 and 1.3.3. The results are presented in Chapter 10.

cated by the fact that certain members of (or groups from) the black community may refuse to be consulted on research initiated and subsidized by Government bodies. If the channels of an investigation or a service are politically controversial, community organizations may probably be disinclined to support the new programmes.

2.11.2 From theory to practice (Steenkamp et al. 1986 : 19-20)

No reason could be found for distinguishing between a philosophy underlying the habilitation and education of impaired black children, and of any other persons. However, the way in which such an almost universal philosophy is implemented may differ in various countries or communities according to a particular ethos, technological development or educational level (as perceived from a certain angle with own norms or subjectivity). The achievement of philosophical objectives will furthermore be influenced by socioeconomic and political factors as well as by the aspirations and needs of the particular population group.

Inadequate facilities or manpower to accomplish the set task may cause the training of educators (parents and teachers) to have a higher priority than the focus on the individual needs of impaired children, in planning educational provision. If mainstream teachers could be thoroughly informed on, for example, epilepsy, many epileptics (whose medication and seizures are being monitored) could be accommodated in mainstream schools instead of being admitted to expensive, specialized schools. This would be in line with the provision of specialized education as well as with a philosophy conducive to normalization, community involvement and optimum support and opportunities for the impaired throughout his entire life.

2.11.3 Aspects to be emphasized in implementation (Steenkamp et al. 1986: 20-21)

- Preventive practices: Genetic guidance
 - Parent counselling: Prior to marriage
 - Prior to conception
 - During pregnancy
 - Postnatal, et cetera.

- Early identification of the at-risk child, leading to early intervention.
- Informal education, at home or elsewhere, by means of optimum utilization of the media, parent counselling and every kind of assistance to parents, professionals and the general community. This includes the informal education the child receives at home.
- Non-formal education:
 - (a) In-service training of teachers
 - (b) Training for assistant personnel, house parents, paraprofessional personnel, et cetera.
 - (c) Vocational training for impaired adults.
 - (d) Training for geriatric leisure activities of the impaired, et cetera.
- Formal training for professionals involved with the impaired child at all levels of development.
- Teacher training with regard to working with the impaired in the mainstream, as well as in specialized education, preschool, primary school, secondary school (subject teaching) and vocational training (All training to include practical experience; constant upgrading of teachers by means of a credit system).
- Educational models, with regard to mainstream, day-care centres attached to primary schools, comprehensive residential schools for the various forms of impairment, et cetera.
- Ongoing practical research, with a "translation" of research results to ensure their feasibility in the educational setting and the community.
- Considering the feasibility of a single academic language in view of, for example, a possible change of school, work opportunities, et cetera.
- Considering the feasibility of integrated schools, especially for exceptional impairments such as autism.

- Planning a programme to encourage community involvement.
- Comprehensive guidance programmes at schools to make pupils and particularly teachers aware of impairments, to encourage them to show more empathy and be more supportive, to acquaint them with medication or "first aid" that might be required, and to instruct them as to when children should be referred for further assessment.
- Counselling for parents of exceptional children, to lead them towards a better understanding of their children and help them to plan a future for these children.
- Continuous habilitation (provision of care and opportunities) for the impaired adult by means of after-care centres, protected and sheltered labour, allowances, housing, communal and recreational facilities, and eventually, also care for the aged and terminal support.

2.12 APPENDICES

In a number of appendices to the report (Steenkamp et al. : 32 et seq.) various aspects of education for impaired blacks are discussed and commented on:

(1) The National Policy for General Educational Affairs Act (Act 76 of 1984)

The eleven principles for educational provision as stated in Law 76 of 1984 are especially applicable to the impaired black child. Each principle has practical and fundamental implications with regard to the impaired black child.

(2) Values and needs of the black community

In planning specialized education for impaired blacks it is necessary to identify the prevailing black philosophies of life and self, as well as traditional values and the current needs of individuals, groups and communities. This should be done with perceptive consideration for level of development, culture, labour potential and available resources (specialized education aligned for the black situation) without getting

too involved in traditions. The school curriculum should primarily reflect the philosophy of the blacks and not that of any other group. It should be relevant to the black child. The kind of adult career for which the child is being prepared, should also be considered. Black education in the RSA is particularly concerned with guiding young people towards the freedom to accept responsibility.

(3) Educational models for children with impairments

The following forms of educational provision are usually made for the impaired:

- mainstream
- adapted (in the mainstream class, in a supportive programme or with individual attention)
- amended (with regard to the curriculum, usually in a special class)
- specialized (usually in separate schools)

Here, the fundamental question is whether the impaired child should be admitted to a special institution for the impaired, or whether he should integrate with and be accommodated in mainstream education.

On the basis of certain foreign models for the education of impaired children, a possible model for an integrated institute for specialized education opportunities for the impaired in the RSA is proposed (Steenkamp et al. : 58 - 66). Aspects receiving special attention in this model, are the following:

- the degree of impairment
- incidence figures of impairments among children
- guidelines for the planning of future provision (equal opportunities, objectives, philosophy, problems surrounding instruction in the mother tongue, economic considerations, et cetera)
- prevention, information, identification, intervention, rehabilitation, after-care, et cetera.

The model for white specialized education could be worth considering: Children who are mildly or moderately impaired remain in the mainstream (ordinary or special classes) until it turns out to be detrimental to the child, in which case he is transferred to a separate school for full-time specialized education.

It could also be feasible to accommodate impaired black children in mainstream schools wherever possible, making adaptations for the impaired who require specialized methods of instruction (in terms of smaller class groups) and changing physical structures (ramps, wider doors, special desks, et cetera). The severely impaired child should still be accommodated in a special institution.

A comprehensive school/centre for specialized education has particular advantages:

- Children are educated and taken care of as close as possible to their own homes.
- Facilities and personnel are not duplicated (e.g. the multiprofessional team).
- All impairments are accommodated in one school.
- Community involvement is increased.
- Transport is made easier.
- Tests, therapies, equipment and the like are available for application to all the variously impaired in a communal centre.
- The school could serve as a research base for specialized education.

(4) Comments on curricula for the impaired

It should be seriously considered to use English as the only medium of instruction. Curricula should make provision for the special needs of the impaired. Education for the impaired should focus on

- development
- decision making
- dialogue
- integration of knowledge
- interaction with the environment.

The concept uneducable should be avoided. Important concepts are the self-concept, independence, trust, security, well-being, et cetera.

(5) Parental involvement, parent counselling and community involvement

- Parent training programmes are required for the parents of impaired children.
- Parents should be involved in the education of the impaired child.
- Community involvement is essential in planning education for impaired blacks.

(6) Identification and assessment

- Early identification is important.
- Labelling the impaired child should be avoided.
- The establishment of centrally situated diagnostic centres is strongly recommended. A multidisciplinary team should be available at each diagnostic centre.
- Assessment poses a problem since appropriate psychological tests are not available (cf. the problems pertaining to language and culture).
- Prevention of impairments is an issue warranting special attention.

(7) Research

- Continued research is necessary with regard to impaired blacks.

- Action research appears to be particularly suitable.
- "Translation" of research results with a view to practical applications warrants attention.

(8) Teacher training

Apart from regular teacher training, the following additional training opportunities exist for the teacher of the impaired child:

- specialized training
- in-service training and work seminars
- part-time training
- credits for obtaining further qualifications.

CHAPTER 3

DEFINITION AND DESCRIPTION OF THE CATEGORIES OF IMPAIRMENT

(Project No. 1)

3.1 INTRODUCTION

This project committee was assigned the task of defining and describing the various forms of impairment.

The following guidelines with reference to the underlying philosophy of education for impaired blacks were applied (Gerber et al. 1986 : xi):

- The philosophy should be based on the eleven general principles formulated in the National Policy for General Educational Affairs Act (Act 76 of 1984) and the principles should be interpreted with particular reference to the child with special educational needs.
- The main point of reference should always be the child. Education outside the mainstream should be considered only when any other placement would be less appropriate.
- The question of mainstream versus specialized education should be considered anew with regard to the black impaired child.
- Sociocultural context will remain important when the philosophy is implemented.
- Classifying children in terms of impairment should be undertaken with care. The child and his needs should be the first consideration.
- The impaired should be part of the community wherever possible. Provision may have to be made for more services in the mainstream school, rather than to transfer children too readily to other institutions.
- The strategy developed for specialized education within black education should be expanded upon to accommodate the present situation in black education.

The following PRINCIPAL THOUGHTS were noted:

- Specialized education should be offered only when mainstream education could be detrimental to a particular child. The context (circumstances in which the child lives and learns) should always be taken into account.
- Differential diagnosis is advocated as the line of approach for all practitioners.
- A wide range of educational options is required within the mainstream, in order to provide a more gradual transition into specialized education.

3.2 RESEARCH METHOD

Research was done by means of a literature study and interviews. The interviews were not conducted according to a set structure since the problems concerning the identification of a specific impairment for example often determined the course of the interview.

3.3 DEFINITIONS AND CONCLUSIONS REGARDING EACH CATEGORY OF IMPAIRMENT

3.3.1 Intellectual impairment

The following criteria for intellectual impairment are critically discussed (Gerber et al. 1986 : 1 - 5):

- intelligence
- social adjustment
- development
- actual causes

The following conclusions are noted with regard to intellectual impairment (Gerber et al. 1986 : 16-18):

(1) Conclusions with regard to definitions

The definition of the AAMD (1983)* is regarded as the most influential in the Western world. According to this definition three criteria apply:

- (a) A current subaverage level of intellectual functioning (neither the cause nor the permanence of the level of functioning is referred to).
- (b) A lag in the child's development that may either be the result of (a) or may merely be associated with it.
- (c) Manifestation during childhood.

With regard to the identification of the intellectually impaired child, this flexible, dynamic definition has the following implications:

- (a) The current level of a child's intellectual functioning, as determined by an appropriate standardized intelligence test, as well as his level of development should be taken into consideration.
- (b) It is not necessary to consider the cause of the impairment or to distinguish between pseudo and genuine intellectual impairment.
- (c) No assessment finding should be regarded as permanent. Educational facilities should make provision for possible changes in a child's situation after a period of time has elapsed.

(2) Conclusions with regard to the classification of the intellectually impaired

Classification of the intellectually impaired is necessary despite any negative side-effects that there may be.

* Definition of the AAMD (American Association on Mental Deficiency) (1983): "Mental retardation refers to significantly subaverage general intellectual functioning resulting in or associated with concurrent impairments in adaptive behaviour and manifested during the developmental period" (Kidd 1983 : 243, 244).

The classification system should be well founded and should meet the following criteria: clarity, range, reliability, practicability and acceptability.

The AAMD classification of 1983* is widely acknowledged as a general system of classification for the intellectually impaired. However, educational classifications are generally based on the traditional division into three categories, namely

- Category 1 : Intelligence score 50-75/80
- Category 2 : Intelligence score 25-50
- Category 3 : Intelligence score 0-25

(3) Conclusions with regard to educational descriptions and terminology

The educational descriptions and terminology currently used, are in accordance with the approach followed with regard to each degree of impairment, i.e. whether the degrees of impairment are dealt with separately or jointly in the teaching situation.

There are the following two approaches in foreign countries:

- (a) The traditional approach where the categories of intellectual impairment are taught separately and therefore are also described separately. It is found in American legislation regarding the impaired, in certain educational regions in England and also in the Netherlands. The descriptions and terminology used in these cases are reasonably specific.
- (b) A more recent approach is the generic or non-categoric approach, whereby different categories are grouped together depending on the level and nature of the education required. This approach is mainly used where mild impairments are concerned and pertains to the intellectually

* The AAMD classification:

Mild mental retardation - Intelligence score 50/55 to 70/75
Moderate mental retardation - Intelligence score 33/40 to 50/55
Severe mental retardation - Intelligence score 20/25 to 35/40
Profound mental retardation - Intelligence score below 20/25
(Kidd 1983 : 244)

impaired in Category 1 : intelligence score 50-75/80, the learning impaired (neurally impaired), and those with an emotional or behavioural impairment with an intelligence score of 50-75/80. This approach is followed in certain states of the USA, in certain regions in England, in Germany and in South West Africa.

In these cases the descriptions and terminology are less specific, e.g. mildly handicapped, learning impaired, generally learning impaired, academically impaired.

Likewise, more severe impairments are sometimes grouped together as severe impairments, although this occurs less often.

3.3.2 Hearing impairment (Gerber et al. 1986 : 54-55)

(1) Conclusions with regard to definitions

- (a) The American definitions* of hearing impairment, deafness and hardness of hearing are generally used and accepted.
- (b) The definitions of deafness and hardness of hearing emphasize in particular the potential for language acquisition.

* Hearing impairment

"A generic term indicating a hearing disability which may range in severity from mild to profound: it includes the subsets of deaf and hard of hearing."

A deaf person: "A deaf person is one whose hearing disability precludes successful processing of linguistic information through audition, with or without a hearing aid."

A hard of hearing person: "A hard of hearing person is one who generally with the use of a hearing aid, has residual hearing sufficient to enable successful processing of linguistic information through audition."

(American Annals of the Deaf, October 1975)

(2) Conclusions with regard to classification

- (a) Classification could be quantitative or qualitative. Quantitative classification requires an audiological assessment of hearing ability by trained personnel.*

Qualitative classifications are based on the criterion of language acquisition.

- (b) A rigid classification system is not advisable, since various other factors need to be taken into account in addition to the degree of hearing loss.

(3) Conclusions with regard to descriptions that are pertinent to education

- (a) The most important issue concerns language acquisition difficulties and related problems.

- (b) Early identification of the hearing impaired person is of crucial importance and any possible way in which this can be achieved, should be explored.

(4) Conclusions with regard to black education

- (a) A great need exists for more trained personnel in schools for specialized education.

- (b) Teachers should be trained to recognize the symptoms of hearing impairment.

- (c) The community should be educated with regard to the impaired.

* The following criteria are applied:

Hard of hearing: Level 1 : 26 - 54 decibels

Level 2 : 55 - 69 decibels

Deaf: Level 3 : 70 - 89 decibels

Level 4 : 90 or more decibels (Gerber et al. 1986 ; 31-32)

- (d) Everything possible should be done to ensure early identification of the hearing impaired.

3.3.3 Visual impairments (Gerber et al. 1986 : 78-79)

(1) Conclusions with regard to definitions and classification

- (a) Blindness requires legal definitions.*
- (b) Educational definitions regard the ability to read printed matter as the distinctive criterion between the partially sighted and the blind.
- (c) The only classification applied pertains to partial sightedness and blindness.

(2) Conclusions with regard to eye diseases

- (a) Eye diseases should be included in the research since it can cause visual impairment.
- (b) Eye diseases in black children should be noted in particular.

(3) Conclusions with regard to educational matters

- (a) An increased number of fully qualified personnel is required in schools for specialized education.
- (b) Teachers should be trained to recognize the symptoms of less serious degrees of visual impairment.

* Regarding blindness, the following criteria are applied in the RSA (Gerber et al. 1986 : 60-62):

1. Visual acuity below 3/60 Snellen
2. Visual acuity 3/60 but below 6/60 Snellen, with the visual field reduced to 50 % of normal, but with the central area of the visual field intact
3. Visual acuity 6/60 Snellen or more, with the visual field reduced to 25 % of normal and the lower area of the visual field reduced to 50 % of normal

- (c) Criteria for admission to schools for the blind and the partially sighted as specified in Appendix 1 of the Educational Services Act of 1967 (Act 41 of 1967), are appropriate.
- (d) In view of the tendency towards mainstream education, special classes for the blind could be a proposition.
- (e) Based on the researcher's own research in the United States of America, mainstream education would at this stage however not be recommended for partially sighted blacks, as
- successful implementation of mainstream education requires
- thoroughly trained teachers;
 - a maximum of 25 pupils per class;
 - a positive attitude of teachers and pupils towards the impaired;
 - auxiliary services by interdisciplinary diagnostic teams, as well as specialized teachers and a variety of teaching aids, and
 - an open classroom educational system in which more allowance is made for individualized instruction than in the conventional classroom system (cf. the American individualized training programmes required by law for all impaired persons).

3.3.4 Physical impairment

This category encompasses a wide range of manifestation forms, namely (Gerber et al. 1986 : 81):

- Neurally related impairments (e.g. cerebral palsy, spina bifida, epilepsy, poliomyelitis).
- Congenital or gained deficits of the skeletal or muscular system, and orthopaedic impairments (e.g. amputations, muscular dystrophy, arthritis, osteogenesis imperfecta).

- Cardiovascular and respiratory problems (e.g. rheumatic heart diseases, asthma).
 - Problems of metabolic origin (e.g. diabetes, cystifibrosis).
- (1) Special educational needs of physically impaired children

It is nowadays generally accepted that not all physically impaired children necessarily require specialized education. The disadvantages involved (e.g. separation of the child from his parental home, or some degree of isolation from the community in general) often outweigh the advantages. Obviously this applies especially to children with less severe impairments such as controlled epilepsy, singular amputations, medically controlled illnesses, mild cerebral palsy with no additional impairment, et cetera.

In the past, one of the biggest mistakes made by schools for the physically impaired was over-inclusion. The attitude of adjusting to the student considerably diminished the child's motivation to adjust to the normal physical environment. In such cases, the good intentions of the teacher had an adverse effect on the child.

In the case of severe physical impairment, however, the child cannot progress adequately without certain changes to his environment. Solutions must be found and adaptations made in such a case, to assist him towards leading such a normal life as is possible, becoming as independent as possible, retaining or even improving his current level of physical mobility and keeping physical deformity in check where possible. This requires, inter alia, the following: self-controllable motorized wheel chairs, special feeding equipment, special furniture, special typewriters, communication aids for those with speech impairments, et cetera. In addition, many of these children require the specialized help of a physiotherapist, speech therapist and/or occupational therapist, physician and nursing assistant (e.g. in the case of asthma or spina bifida).

The education required by physically impaired children should therefore specifically accommodate their problems as well as their abilities, be

offered by specially trained teachers, incorporate the services of medical and paramedical personnel, and take place in close collaboration with the parents (Gerber et al. 1986 : 90-91),

(2) Conclusions with regard to physically impaired children

- (a) According to the literature two groups of children discussed in separate categories in this research project (i.e. those with neural impairment and chronic ailments) are usually included in the category of the physically impaired.
- (b) A general characteristic of physically impaired children is that they experience problems with regard to mobility, physical vitality and self-concept.
- (c) Concerning mainstream education, the special requirements regarding accessibility of school buildings to physically impaired children must be borne in mind (Gerber et al. 1986 : 91).

3.3.5 Neural impairment

This category includes cerebral palsy and epilepsy (Gerber et al. 1986: 93-112).

(1) Conclusions with regard to definitions and classifications

- (a) The definition of cerebral palsy* as formulated by the National Council for the Physically Disabled in South Africa, is adequate (Gerber et al. 1986 : 95).

* "Cerebral palsy is a general term indicating basically a physical disability caused by damage to, or the failure to develop of an area in the brain before the brain has matured. The damage may occur before or during birth or in early childhood. The effect is that the control by the brain over the functioning of the musculature and co-ordination of the body is disturbed. There is no direct injury to the limbs as such."

- (b) A combination of two classifications* of a medical nature is used world-wide.
- (c) The definition of epilepsy** is in general use.
- (d) The classification of the International League against Epilepsy (Gerber et al. 1986 : 103-104) is more complete and has generally been substituted for the old classification of grand mal, petit mal and psychomotor seizures.***

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- * 1. Classification according to type of motor handicap.
2. Classification according to affected limbs.

** Definition of epilepsy (Gerber et al. 1986 : 100-101):
Epilepsy is the sudden disturbance or change in the brain function that occurs as a result of an excessive electric discharge in the brain. It has the following characteristics:

- a) It is temporary, i.e. after the seizure the person functions as he did prior to the seizure.
- b) A decrease or loss of consciousness usually occurs (but not always). A disturbance in movement, sensation, perception and behaviour may also occur.
- c) Seizures can be recurrent with varied intervals ranging from minutes up to years.

*** Classification system of the International League Against Epilepsy (simplified version)

- (a) Generalized seizures
- Non-convulsive seizures
 - Symptoms only related to level of consciousness.
 - Symptoms related to level of consciousness as well as other symptoms.
 - Convulsive seizures
 - Myoclonic seizures
 - Clonic seizures
 - Tonic seizures
 - Tonic-clonic seizures
- (b) Partial seizures
- Partial seizures that do not develop into secondary generalized seizures
 - With singular symptoms, e.g. Jacksonian epilepsy
 - With complex symptoms, e.g. temporal lobe epilepsy
 - Partial seizures that develop into secondary generalized seizures
 - Tonic seizures (secondary)
 - Clonic seizures (secondary)
 - Tonic-clonic seizures (secondary)

(2) Conclusions with regard to descriptions pertinent to education

- (a) Neural impairment is so complex that a general description of its nature is insufficient when it comes to handling a specific child in the school situation.
- (b) This impairment calls for teachers with specialized training who are able to assess the manifestations of the impairment in individual children, and accordingly draw up an individual teaching programme for each child.

(3) Conclusions with regard to the provision of education to impaired black children

- (a) Children who are neurally impaired in the worst degree could probably be more effectively educated in specialized schools where paramedical services are available.
- (b) It would probably be essential for most children with cerebral palsy to receive specialized education on a part-time basis, attending mainstream classes only for certain subjects.
- (c) The epileptic seizures of many children can be controlled to such an extent that they can attend mainstream schools.
- (d) Class teachers should be trained to recognize subtle symptoms of epilepsy.

3.3.6 Learning impairment

- (1) Classification (for the purpose of this investigation (Gerber et al. 1986 : 135-137)

- Group 1: Learning impaired children
- Group 2: Language-learning impaired children
- Group 3: Dyslexic learning impaired children
- Group 4: Gifted learning impaired children

(2) Conclusions, and problems envisaged in the application of definitions and classifications, as well as the identification of learning impaired children in black education (Gerber *et al.* 1986 : 138-140)

(a) With regard to the operationalization of the definition of learning impairment (Chalfant & Kind 1976), mention is made of excluding factors. Before pronouncing a child learning impaired it should be established that

- he is not intellectually impaired (this requires, *inter alia*, a well-standardized, individual, reliable intelligence scale);
- his learning problems have not been caused by his environment;
- his learning problems have not been caused by poor education, and
- his learning problems have not been caused by emotional factors (which may include shortcomings in his upbringing).

The identification of learning impaired children therefore requires a sophisticated assessment system and careful observation by well-trained teachers. Even in the United States of America immense problems are still being experienced with regard to such identification, especially when it comes to discerning between the learning impaired and, for example, slow learners.

(b) The alternative classification proposed in Paragraph 2.3.6(1) may provide a solution in that Groups 1 & 2 be referred to a specialized school or class, while Groups 3 & 4 remain in the mainstream. Certain Group 3 pupils may also have to be referred for specialized education at a later stage.

(c) The non-categorized group of children who are developmentally slow also require attention. Here, reference could be made to research currently under way at the Institute for Behavioural Sciences at the University of South Africa (Unisa), attempting to standardize development scales for black preschool children.

(d) Great confusion exists in the RSA concerning the concept of learning impairments. Since American literature employing the term "learning disability" is freely used in the RSA, it has become imperative to define the concept accurately.

3.3.7 Childhood psychosis

This category includes the following (Gerber et al. 1986 : 144-154):

- psychosis
- infantile autism
- schizophrenia
- manic-depressive psychosis

(1) Conclusions (Gerber et al. 1986 : 155)

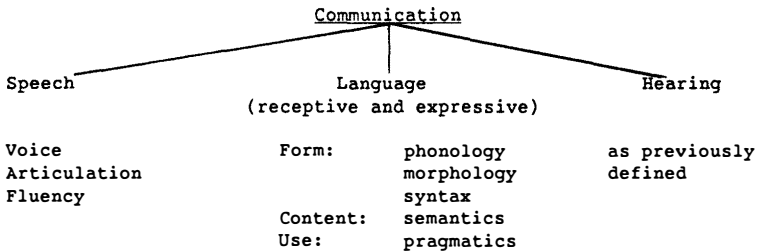
- (a) Psychotic conditions in children are actually very rare.
- (b) Infantile autism occurs the most and is probably the best known psychotic condition in children in the RSA, although the number of children involved is relatively small.
- (c) Occurrence of the other psychotic conditions in children is relatively unknown in the country. However, stress situations, family disruption as well as other psychogenic factors may be on the increase and the incidence rate of schizophrenia in particular may rise. As yet very little is known about these children and now is the time to address issues such as the early identification especially of the less severe and borderline cases, and provision for specialized education and intervention.

3.3.8 Speech impairment

(1) Conclusions (Gerber et al. 1986 : 161)

- (a) The definition* of Kneedler et al. appears acceptable.
- (b) The following classification is generally adhered to by the South African Speech and Hearing Association, as well as the American Speech-Language-Hearing Association:

*"Speech disorders are problems in the intelligible production of language. Speech disorders are composed of specific characteristics or behaviors that hamper vocal production" (Kneedler et al. 1984 : 146).



- (c) Intervention for persons with a speech impairment requires trained personnel.

3.3.9 Environmental impairment (deprivation)

The report deals with the following:

- (a) Possible definitions of environmental impairment. The environmentally impaired child is defined especially in terms of poverty, cultural differences and limited life opportunities. Emphasis is laid on the material, social and educational deprivation to which he is subjected, i.e. with regard to nutrition, clothing, accommodation, medical care, education and training (Gerber et al. 1986 : 163-167).
- (b) Preschool identification of the environmentally impaired child (Gerber et al. 1986 : 167-169).
- (1) Conclusions (Gerber et al. 1986 : 169-170)
- (a) It would not be scientifically justifiable to apply research findings obtained in other countries and pertaining to other population groups in other educational systems, directly to South African conditions.
- (b) Where definitions of environmental impairment are concerned, one could possibly select certain key words and review those concepts within the South African context.

- (c) Concepts emerging from the preceding discussion, are
- lower socioeconomic level
 - poor development of social skills
 - poor application of learning potential
 - poor communication skills
 - large families
 - poor development of cognitive skills
 - lack of parental guidance and motivation
 - lack of medical and nutritional care.
- (d) The theory according to which academic failure is the result of deficiencies within the child is currently being rejected by many experts. The situation and the context in which the child is required to function are also being taken into account.
- (e) School readiness programmes and in particular the effectiveness of such programmes for black children in South Africa should be attended to.
- (f) The following also warrants attention:
- effective instruction
 - methodology of learning to read
 - bilingualism
 - transition to instruction through a second language
 - study methods and parental supervision of homework
- (g) An important aspect of further research in this field would be to analyse the situation of academic achievers in order to ascertain the factors in the black community which are interrelated with a successful school career.
- (h) It appears that the term environmental impairment should be reconsidered (bicultural individual is also often used).

3.3.10 Chronic and terminal illness

The following groups of diseases are included (Gerber et al. 1986 : 173 - 215):

- infections and parasitic diseases (tuberculosis, hepatitis B, malaria, bilharzia)
- neoplasms (growths or tumours e.g. leucaemia)
- nutrient, endocrinal and metabolic diseases
- blood diseases and diseases of blood producing organs
- diseases of the sense-organs and nervous system
- blood circular system diseases
- diseases of the respiratory system
- diseases of the genito-urinary system
- diseases of the skeletal and muscular systems

(1) Conclusions and recommendation (Gerber et al. 1986 : 215)

Since these chronic and terminal diseases are common among black children, the entire list should receive attention.

3.3.11 Multiple impairment

(1) Conclusions (Gerber et al. 1986 : 224-225)

- (a) The term multiple impairment can have different meanings depending on the context in which it is applied.
- (b) As an adjective, it merely describes the simultaneous presence of more than one form of impairment, regardless of the degree to which it is present. In this context a distinction is sometimes made between contingent impairments (resulting from one another), and unconnected or primary impairments. In some cases, however, it can be very difficult to make such distinctions.
- (c) In certain countries like the Netherlands and the USA, the term multiple impairment is used to denote a particular category of children. The criterion applied with regard to placement in this

group is the functioning level of the child and the nature of teaching that he requires. "

- (d) The characteristics of children with multiple impairments depend on the nature, combination and degree of their impairments. Each additional impairment multiplies a child's problems in every area of his development.

CHAPTER 4

INCIDENCE OF THE VARIOUS CATEGORIES OF IMPAIRMENT AMONG BLACK CHILDREN (Project No. 3)

4.1 INTRODUCTION

In general, the black population group in the RSA is far behind with regard to schools and accommodation for all categories of impaired pupils.

From the principles for the provision of education as set out in the HSRC Report: Provision of education in the RSA (1981 : 14-16), it is apparent that

- equal and adequate educational opportunities should be provided, also for the various categories of impaired black children, and
- the provision made for black pupils with special educational needs in all the categories of impairment should on every point be in accordance with the rationales of education.

With regard to the demand for educational provision for pupils with special educational needs, the following recommendations are made in the above-mentioned HSRC report:

- Concerning impaired pupils, provision should be made for differentiated and specialized education. In the provision of specialized education facilities there is, therefore, an increasing demand for comprehensive schools to cater for the various impairments.
- Since a relatively specialized and exclusive personnel application is called for and problems such as the duplication of scarce and expensive facilities and personnel, greater demands regarding placement of children in these schools and restrictions on affordable facilities also need to be addressed, it is recommended that there be an

increasing movement towards comprehensive schools for the various impairments in providing facilities for specialized education (HSRC Report 1981 : 35, 159).

Consequently, the State aims to provide equal and adequate educational opportunities as well as effective education on a differentiated and specialized basis, also for the impaired black pupil with his special educational needs.

With a view to effective educational planning for the various categories of impaired pupils, it is essential to obtain projections on the incidence figures involved.

This investigation therefore entailed the gathering and processing of information from which probable incidence figures could be projected with regard to the various categories of impairment among black school children in the RSA, the self-governing states and the independent states (TBVC countries).

4.2 FORMULATION AND INTERPRETATION OF THE RESEARCH ASSIGNMENT

The Work Committee: Education for the black disabled requested the following:

- collection of incidence figures of the various categories of impairment in First World countries, Third World countries and the RSA
- estimated and projected incidence figures with regard to the impaired black pupil population in the RSA and the black states, based on the available projected figures of black pupils for 1990
- an indication of causing factors with regard to the various categories of impairment in Third World countries, especially the causes peculiar to the RSA.

The researchers of the project interpreted the research assignment as follows:

- Incidence figures for the various categories of impairment among black children in the RSA were not available or reliable. For this reason all the incidence figures for First World and Third World countries that could be obtained, had to be collected and processed to estimate or project probable incidence figures for the population of impaired black pupils in the RSA.

- A complex and divergent variety of factors affect the incidence of impairment in different countries and in different population groups. For this reason, and also because the incidence figures for other countries and for white pupils in the RSA cannot be summarily applied to the population of black pupils in the RSA, the estimated and projected incidence figures derived from this investigation would be regarded only as indications of probable trends of probable figures.

- Since determining actual incidence figures by means of an empirical survey would have required extensive and expensive research, it was not attempted in this project.

4.3 PROBLEM STATEMENT

In view of the introduction and the assignment formulation, the problem to be researched could be formulated as follows:

- What are the estimated or projected incidence figures for the various categories of impairment among black children in the RSA, the self-governing states and the independent states for 1990?

- What factors influence the incidence figures of the various categories of impairment among Third World populations?

4.4 AIM AND RELEVANCE OF THE INVESTIGATION

The aim and relevance of this investigation should be obvious from all the above. For the sake of completeness, it is summarized as follows:

The black population in the RSA is at present far behind with regard to the provision of adequate and effective education and adequate school accommodation for the various categories of impaired pupils.

It has become relevant and urgent to eliminate this backlog, to provide these pupils with equal and adequate educational opportunities, and to strive after parity with impaired white children in this regard.

In order to plan and finance this provision of education effectively, it is essential to obtain indications and to determine trends with regard to the incidence figures for the various categories of impairment among black pupils.

the aim of this investigation is to determine these trends.

4.5 PREMISES

For the purpose of determining a method of investigation and of collecting and processing the incidence figures, the following presuppositions and facts were adhered to:

A provision of education based on the findings and recommendations of the present comprehensive research investigation regarding black specialized education could only be implemented in a few years' time, in a future educational dispensation. For this reason the probable incidence is projected for 1990 when, according to predictions (Carstens et al. 1986 : 24), the number of black pupils in the RSA and the self-governing and independent states will total 6 888 300.

The target populations with regard to this provision of education to impaired black pupils, are mainly Third World populations. Factors affecting the incidence of impairment in Third World populations to a great extent also apply to the black pupil populations in the RSA and the black states.

Information on the incidence and distribution of impairments is quite freely available in the developed countries of the world, but with

regard to the developing countries and population groups this information is either extremely scarce or in some cases does not even exist. The incidence figures of the First World countries and population groups must consequently be taken into consideration in this project, to be used as grounds for the estimation or projection of incidence figures with regard to the impaired black pupil population in the RSA.

- The incidence figures for impaired children in the developing countries and population groups normally will not be lower than those for the prosperous, developed countries (Eedle 1972 : 2-3). Consequently, it can be assumed that the incidence figures projected for the impaired black pupil population in the RSA will be the minimum figures.

- Incidence figures cannot be deduced from the number of pupils attending schools for the impaired, since each (developing and developed) country in the world has a large group of impaired children who

- attend mainstream schools;

- are not accommodated in any school (impaired preschool children and impaired children in certain countries and communities for whom no educational facilities are provided, or in respect of whom the educational facilities are inadequate. For example: less than 2 % of blind children in the developing countries in the commonwealth are accommodated in schools (Eedle 1972 : 9)), and

- have not been identified, assessed and diagnosed with regard to their impairments (cf. the custom in traditional cultures to keep impaired children secret).

- There is a dearth of in-depth studies with regard to the number of children who leave school prematurely on account of poor health, impairments, backwardness, deprivation and prejudice.

4.6 DATA CREATION AND PROCESSING METHOD

It was initially intended to collect data by means of a literature study and a survey type of investigation. Owing to the fact that not all impaired children are accommodated in schools for specialized education, or have been identified and diagnosed, it was finally concluded that it would not be possible to project relatively reliable figures on the basis of a survey type of investigation (e.g. regarding the number of pupils in schools for the impaired). Therefore, only the literature study was conducted.

The incidence figures were obtained through an extensive study of the literature available. All observations* regarding the various categories of impairments were recorded in respect of literary sources, the year and country/countries to which the figure applied and the incidence figure itself (converted to the incidence per 10 000 of the population as prescribed by the work committee).

In processing the incidence figures it was decided to apply the following method in respect of each of the categories of impairment:

- The median of the various observations was calculated (the position of the median being the $(\frac{n+1}{2})$ th value, if the observations are arranged in ascending order).

- The arithmetic mean (\bar{X}) was calculated:

$$\bar{X} = \frac{\text{sum of observations}}{\text{number of observations } (n)}$$

* The term refers to each of the 320 single incidence figures on the various categories of impairment that were collected and taken into account.

- Extreme figures (i.e. those observations that clearly fall far outside the grouped spectrum of the majority of observations) were omitted from the calculation of the median and the arithmetic mean. It is a fact, anyway, that the calculation of the median is not affected by an extreme value.
- Where applicable, the frequency of the observations that appear relatively often in the data has been indicated in order to confirm the probable incidence by comparing the median, the arithmetic mean and the frequency rate with one another.

4.7 FACTORS AFFECTING THE INCIDENCE OF IMPAIRMENTS IN THIRD WORLD COUNTRIES

In the developing countries and communities masses of children suffer from malnutrition and undernourishment, on account of the prevailing poverty and food shortages.

Evidence indicates that malnutrition is the principle cause of various physical and psychological impairments in poor countries (Eedle 1972 : 3). Other important causes are population growth and population mobility (population explosion and urbanization).

Factors affecting the incidence of some of the forms of impairment in Third World countries and Third World populations, are as follows:

(1) Intellectual impairment

It is difficult to determine the incidence of intellectual impairment in developing countries, owing to the lack of reliable intelligence tests, and facilities and services for administering alysing the tests. Furthermore, the available incidence figures differ considerably because the phenomenon of intellectual impairment is closely associated with the demands of the school on the child, and these demands differ from one country and community to the next.

The incidence figures for moderate and mild intellectual impairments increase with low socioeconomic status, family size and distance from urban centres. In general these conditions are common characteristics of Third World populations.

In Third World populations there is a strong possibility of a vicious circle existing between cultural disadvantage and malnutrition (Eedle 1972 : 95).

On account of insufficient stimulation and experience children from developing countries do not perform according to their real potential on intelligence tests standardized with regard to normal children from developed countries. The problem of designing culture fair and culture-free tests must consequently be addressed. Developing countries have difficulty designing intelligence tests suitable for local circumstances and at the same time accommodating the language problem.

Compared with First World countries, intellectual impairment in Third World countries more often results from illness, malnutrition and ignorance than from genetic factors. Relatively few severely impaired children in Third World countries survive their early childhood. Inter-marriage within small communities is responsible for many cases of intellectual impairment in rural areas. Another main cause of intellectual impairment in Third World countries that should be emphasized, is malnutrition and undernourishment during pregnancy. Malnutrition during the early years of childhood also has a notable detrimental effect on 60 - 70 % of the preschool children in developing countries, causing delayed development of the brain or brain damage. In the schoolgoing child, malnutrition and undernourishment cause poor motivation to learn, apathy regarding the demands made by the school, poor school achievement and lack of concentration.

Diseases such as cerebral malaria cause a high incidence of brain damage. Untreated meningitis could develop into encephalitis and consequently cause intellectual impairment.

(2) Hearing impairment

In Third World countries there is a high incidence of both congenital and acquired causes of hearing impairment among children. Uncontrolled epidemics of virus diseases in these countries lead to German measles (rubella) and smallpox, which result in visual, hearing and

cerebral impairments as well as heart diseases. Malnutrition also causes children to have a low tolerance for infections. The following diseases often result in hearing impairments: measles, malaria, mumps, meningitis and encephalitis.

(3) Visual impairment

The following causes of visual impairment are indicated in Third World countries: Poor hygiene, ignorance, poverty, malnutrition (vitamin and protein deficiencies), measles, the use of African medicines ("muti"), neglect (e.g. owing to the views of traditional communities), poor facilities and services for the purpose of early treatment (e.g. of eye infections) and frequent destruction of the cornea and the pupil of the eye.

In developing countries blindness is more often the result of diseases than of congenital defects.

(4) Physical impairment

Eedle (1972 : 53-54) regards the following as the four principal causes of physical impairment in Third World countries:

- leprosy
- poliomyelitis
- cerebral palsy
- tuberculosis

In addition, the following can be cited as direct and indirect causes of physical impairment among children in Third World countries:

- poverty
- ignorance
- diseases
- postnatal infections
- malnutrition (of mother and child)
- the use of African medicines

In many cases congenital abnormalities lead to the following defects among Third World children:

- club foot
- congenital heart diseases
- spina bifida

The following disorders occur fairly often in African countries:

- sickle cell anaemia (affecting the red blood cells)
- albinism
- cerebral haemorrhage

Malnutrition, poor hygiene, ignorance and poor medical services and facilities are the main factors contributing to a high incidence of infections among Third World children, which in turn leads to the following disorders with attendant physical impairments:

- tuberculosis
- leprosy
- poliomyelitis
- measles
- smallpox
- encephalitis

Other disorders with a relatively high incidence in Third World countries are asthmatic diseases, rheumatic fever and rheumatic heart diseases.

(5) Epilepsy

Owing to childhood infections, the incidence figure for epilepsy is higher in Third World countries. In 1970 the incidence figure in Africa was two to seven times that of the incidence in Europe (Eedle 1972 : 75).

An important cause of epilepsy in the African countries is neonatal brain damage on account of traditional birth customs. Other particular causes are

- encephalitis
- meningitis
- poisoning
- malnutrition, leading to kwasjiorkor, beriberi and endemic enlargement of the thyroid gland.

Jilek et al. (1970 : 305-306) lists the following factors that cause epilepsy, according to an investigation conducted in Tanzania:

- infections
- trauma
- malnutrition
- heredity (on account of their low economic status, many men cannot afford "expensive" brides from healthy families and intermarrying consequently occurs)
- venereal diseases
- malaria
- parasitic infections
- enteritis
- encephalomeningitis

4.8 PROBLEMS EXPERIENCED WITH RESEARCH

One of the most fundamental problem questions in the field of specialized education is also one of the most difficult to answer, namely: How many children are impaired? (cf. Cave et al. 1978 : 35).

The worst problem experienced in collecting incidence figures from the literature, pertained to the definition, classification and description of the various categories of impairment, in the educational as well as the medical context. Literature sources are not consistent in their indications of the particular nature and degree of an impairment, for example omitting the particular nature of neural impairments or the particular degree of deafness/blindness in recording the incidence figures.

There is no consensus among experts with regard to the definitions and criteria applying to the various categories of impairment. For the same reason the incidence figures differ considerably. For example, different cut-off points with regard to intelligence scores are used in diagnosing intellectual subnormality. Thus it is acknowledged in the literature that the incidence figures supplied are not consistently reliable and that they are to a large extent estimates or projections. In several cases it boils down to "rough estimates", "general estimates", or even "guesstimates".

It should be emphasized, therefore, that the incidence figures collected during the present investigation in many cases had been estimated by approximation, and that the final figures are a mere indication of general trends with regard to the incidence and distribution of the various categories of impairment.

A positive note with respect to the reliability of the collected figures lies in the fact that the incidence figures recorded in the literature mostly concerned impaired children. The figures largely apply to the developed First World countries.

Research problems experienced in collecting and determining reliable incidence figures were the following:

- The various classifications of impairments do not coincide.
- Estimated incidence figures differ considerably.
- Incidence figures are unavailable for many developed and developing countries.
- The particular nature or degree of certain impairments is not indicated consistently.
- Some of the incidence figures are totally unreliable.

4.9 ENVIRONMENTAL IMPAIRMENT

The researchers of this project maintain that environmental impairment does not belong with the other categories of psychological, sensory, physical and neural impairment. The environmentally impaired child is characterized only by certain amendable environmental and develop-

mental deficiencies and psychosocial backlogs resulting from poverty, deprivation, cultural otherness and cultural and/or geographical isolation, whereas psychological, sensory, physical and neural impairments are of a permanent nature.

Criteria and definitions regarding environmental impairment as well as the incidence figures for this impairment depend on each particular situation and will differ from one country or population to the following. It is an obvious fact that the vast majority of the black population in the RSA is environmentally impaired owing to poverty and cultural otherness. The following statements also apply to the black child population of the RSA:

- Judged by Western educational standards, almost all the children in developing countries are environmentally impaired.
- They are all subject to shortcomings that hamper education for the "new way of life" to a greater or lesser extent.
- Providing adequate educational opportunities for these children is an almost insurmountable problem.

The environmentally impaired child is not dependent on traditional "specialized education" or "education for the impaired", but rather on a variety of compensatory practices and programmes which will compensate for his deficiencies and needs. The total environmentally impaired population of the RSA is much rather dependent on comprehensive economic, social and educational strategies (compensatory education as ecological intervention), to overcome the problem of environmental deprivation.

4.10 PROJECTED INCIDENCE FIGURES FOR THE BLACK SCHOOL POPULATION IN THE RSA AND THE BLACK STATES

The computed incidence figures for the various categories of impairment appear in Table 4.1 in respect of the expected total number of

black pupils in the RSA and the black states projected for the year 1990. It has been based on the following prediction of black pupil numbers in 1990 (Carstens et al. 1986 : 24):

Self-governing states:	2 998 400
Independent states:	2 067 800
Department of Education and Training	1 822 100
GRAND TOTAL:	6 888 300

4.11 FINAL PERSPECTIVE

- The main factors affecting the incidence of impairment in Third World countries are the following:
 - poverty
 - malnutrition
 - undernourishment
 - diseases (epidemics)
 - ignorance
 - population growth
 - population mobility
 - deficiencies in medical services and facilities
 - the use of African medicines
 - shortcomings in respect of dominant culture
 - congenital defects
 - poor hygiene
 - childhood infections
 - traditional birth customs
 - neglect
- If the factors affecting the incidence of impairment in Third World countries are taken into account, it is concluded that the projected incidence figures for the impaired black pupil population in the RSA and the black states will not be lower than those in the developed countries of the world. Therefore, the figures in Table 4.1 should be regarded as minimum figures.
- Problems experienced in collecting the incidence figures were the following: definitions, classifications, criteria and terminology regarding the various categories of impairment did not coincide; estimated incidence figures differed considerably; in the case of several countries and population groups incidence figures were either

TABLE 4.1: PROJECTED EXPECTED NUMBER OF IMPAIRED BLACK PUPILS, 1990

Category of impairment	Calculated incidence figure per 10 000 of the population	Projected expected number of impaired black pupils, 1990			Total
		Self-governing states	Independent states	Dept. of Education and Training	
Intellectual impairment	230	68 963	47 559	41 908	158 430
- mild impairment (intelligence score: 50-75)	191,66	57 467	39 631	34 922	132 020
- moderate impairment (intelligence score: 25-50)	30,66	9 193	6 339	5 586	21 118
- severe impairment (intelligence score: 0-25)	7,66	2 297	1 584	1 395	5 176
Hearing impairment	57,5	17 240	11 890	10 477	39 607
- deafness	8,5	2 549	1 758	1 548	5 855
- hardness of hearing	50	14 992	10 339	9 110	34 441
Visual impairment	10	2 998	2 068	1 822	6 888
- blindness	3	899	620	547	2 066
- partial sightedness	6,7	2 009	1 385	1 221	4 615
Physical impairment	50	14 992	10 339	9 110	34 441
- polio	8,5	2 549	1 758	1 548	5 855
- spina bifida	15	4 498	3 101	2 733	10 332
Neural impairment					
- cerebral palsy	13,2	3 958	2 729	2 405	9 092
- epilepsy	42,5	12 743	8 788	7 744	29 275
- all learning impairments	189	56 670	39 081	34 437	130 188
- neurally determined impairment	11,66	3 496	2 411	2 124	8 031
Childhood psychosis					
- childhood autism	4,5	1 329	930	820	3 099
- emotional impairment	200	59 968	41 356	36 442	137 766
Speech impairment	350	104 944	72 373	63 773	241 090
Chronic and terminal illness	80	23 987	16 542	14 577	55 106
Multiple impairment	27,2	8 156	5 624	4 956	18 736
TOTAL FOR ALL IMPAIRMENTS	1 100 (11 %)	329 824	227 458	200 431	757 713

unavailable or unreliable; where figures were provided, they were not always specified with regard to each different category of impairment and there was no consistent indication of the particular nature or degree of certain impairments.

- Incidence figures for the following categories of impairment were quite freely available (particularly for the developed countries of the world) and can be accepted to be reasonably reliable:

- intellectual impairment
- hearing impairment (deafness and hardness of hearing)
- visual impairment (blindness and partial sightedness)
- cerebral palsy
- epilepsy
- general learning impairment
- infantile autism
- emotional impairment
- speech impairment
- total incidence figure for all impairments

- Incidence figures for the following categories of impairment were either unobtainable, or too few observations could be traced:

- particular physical impairments such as poliomyelitis and spina bifida
- neurally determined learning impairment
- multiple impairment
- particular classifications of cerebral impairment, for example paraplegia, triplegia, quadriplegia, et cetera
- particular classifications of epilepsy
- particular classifications of learning impairment
- particular classifications of multiple impairment
- particular classifications of childhood psychosis, e.g. neurosis, depression, et cetera (many observations were recorded, however, in respect of the general category of emotional impairment)
- particular classifications in respect of chronic and terminal illnesses such as asthma, heart disease, diabetes, tuberculosis, cancer, et cetera

- On account of the unavailability and unreliability of incidence figures, the incidence figures projected for the impaired black pupil population in the RSA and the black states for 1990 must only be regarded as broad indications or trends.

- The projection of the expected numbers of impaired black pupils in 1990 implies that enormous demands are going to be made with regard to providing specialized education for such a mass of pupils.

CHAPTER 5

CURRENT PROVISION AND SITUATION IN SCHOOLS FOR IMPAIRED BLACK CHILDREN (Project No. 4)

5.1 FORMULATION AND INTERPRETATION OF ASSIGNMENT

This project comprised

- a survey of current educational provision for impaired black pupils
- an evaluation of the present situation in schools for impaired black children, in order to identify existing problem areas and deficiencies
- planning the adequate and appropriate educational provision to which the impaired black pupil is rightfully entitled.

5.2 AIMS OF THE PROJECT

- To determine whether the existing services are adequate.
- To contribute towards the provision of sufficient services for the impaired black pupil with regard to prevention, education, care, treatment and rehabilitation, and to ensure the most effective utilization of the existing services.
- To contribute towards the negotiation of sufficient work opportunities for the black impaired, with reference to the information gathered.
- To promote independent functioning by the impaired black person (Olivier 1986 : 15).

5.3 SPECIALIZED EDUCATION FOR BLACK PUPILS

The report outlines the inception and development of educational provision for the impaired black pupil and by means of a table illustrates the extent to which this educational provision has been expanded during 1961 - 1986 (Olivier 1986 : 16-22).

5.4 COURSE OF RESEARCH (Olivier 1986 : 23-24)

Apart from a literature study, the practice of black education in the RSA as provided by the Department of Education and Training was explored by means of a questionnaire and visits to schools. Information was also obtained directly from the above-mentioned department. The questionnaire submitted to principals of mainstream schools and schools for specialized education contained questions on identification procedure, intervention and educational provision with regard to the impaired. Information was also required concerning the persons involved in those activities, the number of pupils receiving attention, the provision of facilities and the extent to which educational provision was being made for impaired black pupils.

A sample of 210 mainstream schools (180 primary and 30 secondary) was randomly selected. Schools with fewer than 200 pupils were excluded from the investigation. In addition to the 210 mainstream schools all the schools providing some form of specialized education were included in the investigation. The number of mainstream schools selected from each region was determined on the basis of the total number of rural and urban schools (with more than 200 pupils) in the region. With regard to the mainstream schools, questionnaires were submitted only to those controlled by the Department of Education and Training. Schools in the self-governing and independent states were not included in the investigation.

5.5 RESEARCH RESULTS

The following problems encountered in the research have contributed to the fact that the research results are not totally reliable (Olivier 1986 : 31-32):

- On account of the fact that education has not yet been made compulsory for blacks, all children of schoolgoing age have not yet been admitted to schools and could therefore not be included in the investigation.
- Criteria for the identification of impaired pupils are not generally known as yet. Consequently, some pupils suffering from an impairment

have not yet been identified or cannot be identified. Impairments such as deafness or blindness can be recognized quite easily, but sophisticated identification criteria, considerable expertise and comprehensive training are required to identify pupils who are hard of hearing, partially sighted, intellectually impaired, or suffering from petit mal epileptic seizures. As a result, such children are frequently admitted to mainstream schools and classes without having been identified.

- Current unrest in black townships has totally disrupted school attendance in some cases. Questionnaires submitted to such schools have either not been returned, or have not been completed in full.
- Owing to the current inadequate educational provision for impaired pupils, one could assume that many children have not been admitted to a school and are being taken care of at home by their parents or relatives. Consequently, nobody is officially aware of their existence. Experience has indeed proved that, as soon as educational provision for such children becomes available and is made known in a certain area, children are brought to the fore of whose existence nobody has formerly been aware.
- Not all the questionnaires that had been submitted to schools, were returned. Consequently, the final sample was smaller than had initially been planned.
- In some cases, the questionnaires that had been returned were incomplete.

It has become apparent that provision is currently being made for the education and training of black pupils with the following impairments only (Olivier 1986 : 32-33):

- Blindness and severe partial sightedness
- Deafness and severe hardness of hearing
- Cerebral palsy
- Physical impairment
- Severe intellectual impairment.

No particular provision is made for the following categories of impairment:

- Epilepsy
- Intellectual impairment (excluding the category of severe intellectual impairment)
- Specific learning impairment
- Childhood psychoses
- Speech impairment
- Environmental impairment
- Chronic and terminal illnesses.

Provision with regard to the first group of impairments listed above, is illustrated in Table 5.1 (Olivier 1986 : 33-41).

From Table 5.1 it is apparent that the education indeed provided with regard to certain forms of impairment, is yet inadequate. The project report speaks of "a total underprovision of educational facilities" (Olivier 1986 : 36).

The following findings of the empirical investigation are indicated (Oliver 1986 : 42-63):

- In a high percentage of schools, there is uncertainty with regard to the identification of impaired pupils. Consequently, teachers sometimes fail to recognize pupils suffering from an impairment, especially in the large number of cases where the impairment is not clearly evident. Pupils with obvious impairments can be identified more readily. There is a need for feasible identification criteria to facilitate the early identification of impaired pupils.
- In some mainstream schools provision is made for impaired pupils by way of mainstream classes where teachers provide assistance on an individual basis or in small groups. However, teachers in mainstream

schools do not have the training to provide specialized intervention. In several cases no impaired pupils are permitted to attend the mainstream school. In schools for specialized education the educational provision made for impaired pupils is adequate.

TABLE 5.1: EDUCATIONAL PROVISION FOR IMPAIRED BLACK PUPILS

Impairment	Number of schools/divisions	Pupils admitted	Number of pupils for whom provision ought to be made according to estimated incidence figures	Per 10 000 of the school population	
				Current provision	Estimated incidence figures
Blindness and severe partial sightedness	12	932	3 916	1,55	5,57
Deafness and severe hardness of hearing	19	2 567	8 356	4,27	11,35
Cerebral palsy	1	190	9 713	0,32	13,18
Physical impairment	18	1 677	5 389	2,79	7,37
Severe intellectual impairment	38	1 804	21 710	3,00	40,00

- The expression of his emotions proves to be more of a problem to the impaired than the unimpaired. Problem behaviour includes aggressiveness, lack of concentration, dishonesty, enuresis, encopresis, sexual malpractices, et cetera.

- Impaired pupils were accepted by 52 out of 101 mainstream schools.

- In mainstream schools there is little evidence of a "multidisciplinary team" to identify impaired pupils. In most cases the identification is left to the teachers. In specialized schools multidisciplinary teams are actively involved. Educational psychologists should play a more significant role in the identification procedures.

- Compared with the situation in mainstream schools, one could more readily describe the intervention in the specialized schools as multi-professional. The social worker and the school nurse feature most prominently.

- In mainstream schools only 14 out of 295 (i.e. 4,7 %) teachers responsible for the education of impaired pupils have been appropriately trained. In schools for specialized education 241 out of 713 (i.e. 33,8 %) are teachers trained in specialized education. A large number of teachers is currently undergoing in-service training. The provision ratio of personnel in schools for specialized education is exceptionally favourable, and ranges from 1 : 5 to 1 : 15, with an average of 1 : 11 (teacher : pupil relation).

- In certain cases accommodation for impaired pupils is inadequate in terms of both quality and quantity. The same applies with regard to the provision of teaching aids. Provision is as follows:
 - 26 out of 43 schools have adequate accommodation
 - 33 out of 43 schools have adequate teaching aids
 - 23 out of 43 schools have hostel facilities
 - 31 schools have transport facilities
 - at 12 schools with hostels, transport is not needed
 - at 35 out of 43 schools, hospital facilities are available in the immediate vicinity.

- The most serious problems experienced with regard to education for the impaired are the following:
 - problems regarding the pupils (behaviour problems, passiveness, limited choice of occupation, language problems, problems relating to multiple impairment, et cetera)
 - problems regarding provision of professional support services (provision of paramedics, social workers, medical services, psychologists, et cetera)
 - problems regarding hostel and teaching personnel (inadequate training and experience, lack of initiative and motivation, insufficient personnel, et cetera)
 - problems regarding the parents (indifference, lack of involvement, superstition, rejection of the child, illiteracy, et cetera)
 - problems regarding accommodation (waiting lists, not up to standard, need for resource centres, playgrounds and recreational facilities, et cetera)
 - problems regarding the availability of funds (insufficient funds)
 - problems regarding identification of pupils (need for feasible criteria, problems regarding early and accurate identification, lack of professionals, problems regarding placement)
 - diverse problems (lack of community involvement, unrest conditions, transport difficulties, problems regarding work placement)

Conclusion

The problems cited indicate the need for improving particular aspects of the current services, such as specialized intervention, schools for epileptics, medical services, additional training of teachers and hostel personnel, parent counselling (towards adequate parent involve-

ment), adequate accommodation, effective and early identification (criteria and training), et cetera.

5.6 FINDINGS AND RECOMMENDATIONS

Findings and recommendations are based on

- a literature study
- a study of annual reports
- questionnaires to schools
- visits to schools
- interviews.

5.6.1 Prevention of impairment

(1) Findings

Little is being done with regard to the prevention of the various forms of impairment among the black population. The matter of prevention has become one of paramount importance. Preventive measures comprise the following:

- Primary measures: Preventing the impairment from originating, for example by means of antenatal diagnosis and termination of the pregnancy.
- Secondary measures: Preventing symptoms from developing (early treatment).
- Tertiary measures: Early treatment that can reduce or remove (cure) the symptoms (impairment).

A strong need exists for effective preventive measures and early identification. In the long term this could bring about savings with regard to the considerable costs of treatment. There is considerable ignorance concerning the causes, the nature and the prevention of impairments. It is of the utmost importance to disseminate relevant information in this regard. Early identification will ensure timeous

intervention and prevention. There is also a need for the psychosocial support of the impaired and their families. This service could be co-ordinated with prevention and intervention.

(2) Recommendations (Olivier 1986 : 66)

- A strategy needs to be devised for compiling, producing and distributing relevant informative material to the black community in general, impaired persons, personnel in education and the health services, et cetera. The material should be compiled in a manner as to promote prevention and early identification of impairment and a better understanding of the impaired.

- The establishment of centres for early diagnosis and counselling is imperative if optimal efficacy with regard to prevention, early identification and counselling is to be achieved. It is recommended that strategically situated centres be established in co-operation with the Department of National Health and Population Development. Such centres will have to be staffed, inter alia, by Genetic Services personnel, nursing professionals and social workers as members of a multiprofessional team.

- Funds will have to be made available for this purpose.

5.6.2 Early identification

(1) Findings

Early identification of the impaired child is of the utmost importance, indeed being a prerequisite for effective intervention. This pertains particularly to the identification of certain impairments during the preschool years and the important preventive measures that would consequently become possible. Feasible criteria for effective identification and intervention need to be formulated. Trained and experienced personnel are also required to provide adequate identification and intervention services.

There is much ignorance and a lack of experience concerning the identification and identification criteria with regard to particular impairments, such as epilepsy, moderate intellectual impairment, partial sightedness, hardness of hearing and speech problems.

(2) Recommendations (Olivier 1986 : 68-69)

- Workable criteria should be formulated for the provisional identification of all impairments dealt with in this report.
- Teaching personnel should receive comprehensive training with regard to the application of such criteria in order to identify severely as well as moderately impaired pupils.
- Teaching personnel should also receive training with regard to the referral of pupils whom they have identified as being probably impaired. In many cases such a referral is necessary for a final and official diagnosis, as well as to obtain a prescription for medication or medical treatment where applicable.
- The services of a multiprofessional team are essential, inter alia, for the confirmation of conclusions regarding the identification and placement of the impaired. It is consequently recommended that the services of multiprofessional teams consisting of medical doctors, paramedics, school social workers, nurses, educational psychologists and optometrists be made available in centrally situated diagnostic centres.

Where necessary, scarce specialist services could be utilized on a session basis.

- Finally it is recommended that all teacher training curricula include the deal with the subject of identification of impaired pupils.

These recommendations imply that research be conducted to formulate reliable criteria for the identification of impairments and that suitably qualified personnel be appointed to implement the criteria.

5.6.3 Intervention for the impaired

(1) Findings

Real attempts are being made to provide in-service training for the teachers of impaired pupils. Textbooks and study guides are provided and courses on specialized education are presented, with a promotion for those teachers who pass the examination. Teaching staff are encouraged to obtain better qualifications and many have already completed the courses. The teachers are generally committed and motivated, but several have not yet been appropriately trained. Other forms of provision include information and guidance, conferences, visits, et cetera. A lack of essential support services impedes intervention for impaired pupils.

(2) Recommendations (Olivier 1986 : 71)

- An in-depth investigation concerning the extent to which school social workers, school nurses, paramedics and educational psychologists could contribute towards more successful intervention for the impaired, is recommended.
- An investigation is also recommended to ensure that teachers on the staff of schools for specialized education be appropriately trained. Refresher courses could be offered in addition to formal training, to inform teachers of the most recent developments in education for the impaired.
- Consideration of the appointment of school social workers, school nurses, paramedics and educational psychologists should be based on the post : pupil ratio. The financial implications and the intended model of implementation should also be taken into account. Liaison with training institutions is essential, to ensure optimum relevance in the training afforded.

5.6.4 Parent counselling

(1) Findings

Taking care of and raising an impaired child puts high demands on the family members, most of whom do not understand his needs and problems. These families need guidance, information, advice and support. The parent should be counselled on accepting and supporting his impaired child. To the impaired child, being placed in a boarding school or being rejected means a lack of communication with his family, and this affects him deeply. Such a child readily experiences feelings of not really belonging and of isolation. In this case parent counselling is best performed by school social workers and educational psychologists. A favourable family environment contributes to the impaired child's academic success.

(2) Recommendations (Olivier 1986 : 72-73)

- The appointment of educational psychologists to schools for impaired children should be considered in principle. The appointment of one educational psychologist per hundred pupils would alleviate the burden on the principal and his personnel considerably and result in greater success.
- The appointment of school social workers should likewise be considered in principle. This particular discipline could make a valuable contribution, inter alia, with regard to parent counselling.
- It is generally understood that very few qualified school social workers and educational psychologists are available, but it is also essential to make a start somewhere. Once the need has been acknowledged and these posts have been approved in principle, it will serve as an incentive for those interested to train for the professions.

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5.6.5 Comprehensive schools for the impaired

(1) Findings

Educational provision for impaired pupils is expensive, but essential. The special educational needs of the impaired can only be met by means of the provision of specialized education, e.g. in terms of accommodation, specially trained teachers, a smaller teacher : pupil ratio, special educational facilities, auxiliary services, et cetera. The current trend in specialized education is towards multiple provision under one roof or on the same grounds. At several schools provision is already being made for more than one form of impairment. One would have to acknowledge that there are certain disadvantages to combining different forms of impairment. Nevertheless, comprehensive schools providing for more than one form of impairment are cost-effective, because a more effective application of scarce and expensive specialist services and manpower is made possible. The multiprofessional team can make a much greater contribution in such a school and the duplication of facilities can largely be eliminated (sports grounds, libraries, medical facilities, et cetera). These schools could contribute to the pupils' acquisition of social skills as well. Another advantage is that the provision of specialized education could be better located throughout the country. In-service training of teachers could also be tied in with the comprehensive school. Finally, such schools could ideally serve as assessment or multidagnostic centres, which would facilitate the identification of impaired pupils as well as parent counselling.

(2) Recommendation (Olivier 1986 : 76)

The establishment of comprehensive schools for impaired pupils should be investigated and considered. Extensions to existing schools could also be considered wherever possible. However, measures should also be taken to prevent impaired children from becoming institutionalized, for example by means of programmes which would bring them into contact with unimpaired children. The ideal should currently be to phase in one comprehensive school in each region. In this way the concept of comprehensive schools for the impaired could be tried and tested.

5.6.6 Educational provision for impaired pupils (Olivier 1986 : 77-78)

(1) Findings

Briefly summarized, educational provision for impaired pupils currently (October 1986) comprises the following:

- Education for the impaired is provided in 72 schools and this includes the self-governing and independent states.
- Some schools, however, provide for more than one form of impairment, functioning as separate divisions under one administration. (This does not include the instruction of 304 moderately intellectually impaired pupils in 28 special classes.) There are 88 such divisions at the 72 schools mentioned above.
- 7 170 impaired pupils are thus accommodated.
- The core statistics on the above are as follows:

Category of impairment	Number of locations/divisions	Pupils involved	Estimated incidence figure for 2020
Blind and partially sighted	12	932	3 916
Deaf and hard of hearing	19	2 567	8 356
Cerebral palsied	1	190	9 713
Physically impaired	18	1 677	5 389
Severely intellectually impaired	38	1 804	21 710
TOTAL	88	7 170	

- With the exception of 304 intellectually impaired pupils who are receiving instruction in 28 special classes, no provision for specialized education has as yet been made for the child with a moderate intellectual impairment. According to projections there are approximately 45 000 such children.

- No special provision is being made for pupils with specific learning impairment, speech impairment, epilepsy, chronic and terminal illnesses and childhood psychoses.
- Pupils with multiple impairments have been included in the above statistics.

It is concluded from the above that impaired black pupils are on the whole underprovided for in terms of educational facilities.

At present no special provision is being made with regard to the following forms of impairment:

The specific learning impaired, the moderately intellectually impaired, the speech impaired, epileptics, pupils with chronic and terminal illnesses and childhood psychoses.

Pupils with cerebral palsy do receive attention, but the existing provision is totally inadequate.

A large number of pupils with severe intellectual impairment has already been admitted to training centres, but the existing provision caters for less than 10 % of these pupils.

Even though reasonable provision has been made for impairments such as hearing impairments, visual impairments and physical impairments, it is still insufficient (Olivier 1986 : 78).

(2) Recommendations (Olivier 1986 : 79-80)

- Educational provision for the moderately intellectually impaired should be regarded as a great priority. At present, these pupils find themselves up an academic blind alley in mainstream classes. To a great extent they are also a check to the progress of other pupils in the class. Their academic failure causes them frustration to a point where they have become a problem to themselves and the teaching staff.

Educational provision for the moderately intellectually impaired will have great financial implications. Therefore, it is recommended that junior pupils with moderate intellectual impairment be placed in special classes at primary schools as a first step, the planning of specialized schools for senior pupils then to be undertaken at a later stage. The high expenditure involved could in this way be spread over a longer period.

- Educational provision for the severely intellectually impaired should be expanded annually according to a set percentage formula. An annual increase of 20 % in the said provision seems appropriate.
- Additional educational provision for the cerebral palsied and, in particular, the epileptic should also be considered. Once the necessary identification criteria have been formulated, the pupils could be identified to receive the specialized education they require. Existing services should be expanded.
- Since it is at present practically impossible to provide specialized education for pupils with a specific learning impairment, it is recommended that the identification of these children, the kind of educational provision that would be most beneficial for them, and appropriate teacher training be speedily investigated. Educational provision for these pupils could subsequently be addressed as a long term project.

The recommendation as above also applies to pupils with chronic and terminal illnesses and childhood psychoses.

- Finally, it is recommended that the existing educational provision for the hearing, visually and physically impaired be expanded annually to meet present and future needs.

5.6.7 Work placement of impaired pupils/persons

(1) Findings

Very little understanding and insight, and a high level of ignorance and prejudice prevail with respect to the problems and needs of the impaired. This holds true for the general public, employer organizations and even the authorities. It has an impeding effect on the opportunities offered for training and occupations. The term "impaired person" all too often has a negative connotation attached to it, despite the fact that the impaired could make a greater contribution to the labour market than is generally believed.

The necessity for vocational training for the impaired is clearly implied. Despite his limitations, the impaired person has a right to education, training and work placement. His special needs in this regard should be met.

Greater community involvement is of crucial importance in this context, with regard to the private sector, churches, welfare organizations, et cetera. The impaired needs a great deal of support concerning aftercare that should follow on work placement and the integration into a new environment. Effective work placement of the impaired thus poses a substantial problem. Prejudice among community members and employers should be stamped out.

(2) Recommendations (Olivier 1986 : 82-83)

- The creation of job opportunities for the various categories of impaired persons should be investigated in collaboration with the Department of Manpower.
- With the mass media's assistance, attempts should be made to eliminate the existing prejudice towards the impaired.

- To achieve more efficacious work placement for the impaired, the appointment of social workers should be considered. Social workers could render ongoing support to impaired persons during the work placement process.

- Lastly, the vocational options for the various categories of impairment should be investigated by educational psychologists of the Department of Education and Training. Liaison with employer organizations is of the utmost importance in this respect, to ensure relevant vocational guidance for the impaired.

- The recommendations set out above underline the necessity of appointing school social workers and educational psychologists to schools for the impaired. It is essential for the impaired to receive the needed guidance and support when having to decide upon an occupation on entering employment.

5.6.8 Auxiliary services

(1) Findings

Providing the services of a multiprofessional team is of crucial importance with regard to education, training, care, treatment, et cetera for the impaired child. The following specialists could be included:

- medical doctors
- paramedics
- school nurses
- school social workers
- educational psychologists
- speech therapists
- occupational therapists
- physiotherapists

Owing to the lack of available personnel, these posts would be difficult to fill.

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- physiotherapists

Owing to the lack of available personnel, these posts would be difficult to fill.

(2) Recommendations (Olivier 1986 : 84-85)

- An investigation is recommended to promote and encourage training of school social workers, paramedics, school nurses and educational psychologists. Scholarships could be made available for this purpose.
- A formula for the appointment of multiprofessional teams to schools for the impaired needs to be established. It should also be approved in principle that such posts be created in the schools.
- The allocation of personnel to the division Educational Auxiliary Services ought to be reconsidered. Members of this division could make a meaningful contribution with regard to the identification of and intervention for impaired pupils.

5.6.9 Location of schools

(1) Findings

Schools must be located across the country in such a way as to bring specialized education facilities within reasonable reach of all impaired pupils. Cost-effectiveness and optimal utilization of these expensive educational facilities deserve careful deliberation. Density of the pupil population, proportionate geographic distribution, transport and hostel accommodation serve as criteria for the location of specialized schools.

Pupil density is highest in the following areas:

- Pretoria and vicinity
- The Vaal Triangle
- Durban, Pinetown, Pietermaritzburg and vicinity
- Port Elizabeth/East London/Uitenhage area
- The Western Cape
- Bloemfontein and the goldfields of the Orange Free State

In these areas, however, there are only the following schools for the impaired:

- Visual impairment - 2 schools
- Hearing impairment - 5 schools
- Physical impairment - 9 schools
- Cerebral palsy - 1 school
- Severe intellectual impairment - 28 training centres

N.B.: No provision is made for any other category of impairment.

- Fair provision
 - hearing impairment
 - physical impairment
- Inadequate provision
 - severe intellectual impairment
 - visual impairment
 - cerebral palsy
- Lack of provision
 - epilepsy
 - moderate intellectual impairment
 - specific learning impairment
 - speech impairment
 - chronic and terminal illnesses
 - childhood psychoses

(2) Recommendations (Olivier 1986 : 88)

- Specialized education provision should, wherever feasible, be extended in all the regional areas, with a view to eventually providing adequate facilities for the categories of hearing impairment, visual impairment, epilepsy, cerebral palsy and physical impairment.
- A comprehensive study is recommended with regard to pupils with specific learning impairment, speech impairment, intellectual impairment, chronic and terminal illnesses and childhood psychoses in order to determine the most appropriate educational provision for these pupils.

- The most important implication of the recommendations above concerns the major economic commitments involved. By dint of a national plan for specialized education these expenses could, however, be spread over a period of time, which might bring the undertaking within the range of the available funds.

5.6.10 Further research

(1) Findings

It is essential that more relevant questions regarding education for the impaired be researched. Research projects requiring urgent attention include the specification of criteria for the identification of particular categories of impairment, finding and creating job opportunities for the various categories of impairment, educational provision for the impaired within a comprehensive school structure, and developing appropriate curricula and teaching methods for the various categories of impairment (Olivier 1986 : 89).

(2) Recommendation (Olivier 1986 : 89)

In order to keep abreast of the requirements and latest development in the field of specialized education, it is recommended that relevant research projects continually be identified and undertaken.

5.7 FINAL PERSPECTIVE

In this report the provision of education for impaired black pupils has been examined and evaluated. The major contribution being made is greatly appreciated. However, the existing provision does not meet the total requirement. In respect of certain categories of impairment no provision for specialized education has as yet been made.

CHAPTER 6

IDENTIFICATION, EVALUATION AND DIAGNOSIS OF IMPAIRED BLACK CHILDREN (Project No. 5)

6.1 FORMULATION AND INTERPRETATION OF ASSIGNMENT

This investigation focused primarily upon the identification of intellectual impairment, but also touched upon the other impairments. The literature on visual, hearing and intellectual impairment was reviewed. A semi-structured interview schedule was used to ascertain current identification procedures as well as attitudes and needs of the black population. A model for identification, evaluation and diagnosis was consequently proposed. A screening instrument was then designed to elicit information on the following:

- sensory acuity
- mobility
- physical health
- speech
- academic ability
- language comprehension
- expressive language
- spatial and temporal orientation
- antisocial behaviour
- emotional behaviour
- school-appropriate behaviour

The study culminated in presentation of the Pupil Screening Scale.

6.2 ORIENTATION

Before children can receive their rightful educational provision, their impairments need to be identified. Teachers are inadequately trained in identification, evaluation and intervention procedures with regard to impaired children. The need for identification procedures and criteria is apparent.

The term "identification" points to the first step in the assessment of children with impairments (by teachers). "Diagnosis" indicates an in-depth assessment by a multidisciplinary team, to determine the nature and degree of the impairment as well as the remedial measures required.

6.3 PROBLEM STATEMENT

In order to provide appropriate education for impaired black pupils, a system of accurate identification which can be implemented by teachers, is required. This investigation was aimed at developing an identification model. The focus was on intellectual impairment. A screening scale should, however, also cover the abilities and aspects of behaviour listed in 6.1, e.g. sensory acuity, mobility, speech, language, antisocial behaviour, et cetera and should provide information with regard to the various impairments.

6.4 AIMS OF THE INVESTIGATION

- To provide guidelines for primary school teachers in identification of intellectually impaired children.
- To develop a model for teacher training and for the identification, diagnosis and evaluation of impaired children.
- To develop a reliable and effective method of identifying intellectually impaired children.
- To provide initial evidence on the usefulness of a preliminary screening instrument for identification of impaired children.

On account of practical considerations the investigation was limited to the Transvaal and concentrated on interviews with teachers, educationalists and medical personnel. The focus was on black primary school teachers who are directly concerned with the identification of impaired children. These teachers applied the screening instrument in respect of children who demonstrated inadequate academic progress.

The results are therefore applicable to the black urban environment and contain, inter alia, Xhosa, Zulu and Sotho respondents.

6.5 LITERATURE STUDY

A view of the literature was undertaken with regard to the following aspects of identification (Skuy et al. 1986 : 12-39):

- the identification of visual and hearing impairments, since these impairments impede academic achievement;
- the identification of intellectual impairment (behavioural characteristics, categorization, et cetera), and
- screening, diagnosis and the role of the teacher in the identification of impairments.

The following became apparent:

- The criteria for identification of visual and hearing impairments are not adequate for the average class teacher. They should be supplied with concrete behavioural characteristics as criteria. In addition, teachers should be made aware that children demonstrating poor academic progress may be suffering from visual or hearing deficits rather than intellectual impairment.
- Teachers find it difficult to distinguish between learning impaired, intellectually impaired, emotionally disturbed and underachieving pupils. Environmental impairment (educational disadvantage) could be another factor causing poor academic achievement.
- Categorization could have various advantages as well as disadvantages (Skuy et al. 1986 : 21-22).
- Intellectual impairment is ascertained in consideration of the following:

- intelligence scores (the dominant criterium)
 - intellectual functioning
 - adaptive behaviour
 - language and communication
 - social skills
 - academic (scholastic) achievement
 - aptitude tests and scholastic tests
- The causes of intellectual impairment and the characteristics of the intellectually impaired child are discussed in the full report (Skuy et al. 1986 : 27-32).
- Screening, used to identify potential at-risk children, is a quick, relatively easy and inexpensive method of evaluating a large group of pupils and identifying those with possible problems. Screening is not a diagnosis nor should it be regarded as a comprehensive assessment. It is merely the first step in identifying children who require a more comprehensive assessment. Screening procedures include observation, rating scales, intelligence tests, school records, interviews and questionnaires. Referrals made as a result of screening should lead to a thorough diagnostic assessment by a multiprofessional team. The problem in screening black children is that teachers are unaware of the characteristics of the various impairments because they have not been trained to identify possible problems.
- Diagnosis ascertains whether a problem actually exists, defines the causes of the impairment and develops a strategy for assistance to the child and his family. Diagnosis requires more in-depth information than screening. The nature of the impairment determines the composition of the multidisciplinary team responsible for gathering the information. A full diagnostic assessment would provide the following information:
- physical growth and development (including medical history and condition)
 - cognitive functioning

- social/emotional development (adaptive behaviour)
- fine and gross motor skills
- perception and sensorimotor skills
- vocational interests and skills.

This kind of evaluation is extremely time-consuming and requires well-qualified personnel. It would therefore be worthwhile to increase the involvement of teachers in assessment procedures.

- The role of the teacher is of central importance for screening. Teachers know the children and have ample opportunity to observe and compare them. They should identify behavioural patterns that seem to interfere with learning, inadequate basic skills (reading, spelling, arithmetic), sensory impairments, et cetera, and also supply details and evaluations in respect of the pupil. Teachers require training in administering and scoring tests, observational techniques and keeping records (e.g. concerning peculiar actions and poor academic performance). Skills the teacher should possess include, inter alia, knowledge of the characteristics of impaired children and of their learning problems, the expertise to evaluate a child by means of screening and to prepare a profile on the child, et cetera. The fact that the black teacher is considerably behind in this respect, is a matter that should be rectified by means of teacher training and in-service training. Teachers also require reliable and valid procedures to assist them with identification. One of the aims of this investigation was indeed to design a suitable screening instrument with regard to the black child. The role of the teacher in the identification process thus includes the referral of the child, consultation with professional personnel, adjustment of curricula and methods of instruction to suit the child, and the gathering of information. Three major factors appear to affect accurate identification:

- teaching-training
- knowledge of impairments
- reliable and valid screening instruments

6.6 SURVEY ON ATTITUDES, NEEDS AND IDENTIFICATION CRITERIA FOR IMPAIRED BLACK CHILDREN

Fifty six black preschool and primary school teachers from Soweto, a small number of educationalists and social workers, a school health official, a community sister and a psychiatrist were interviewed with regard to, inter alia, problems and impairments observed, identification criteria, record keeping, facilities available, assistance required in connection with identification procedures, et cetera. The following trends were observed:

- Teachers are aware of a wide range of problems and impairments in their classes. They apply informal identification criteria, e.g. academic achievement, individual interviews with pupils, observation, informal tests, et cetera. No formal criteria are applied, but professionals are occasionally consulted. Few teachers keep a record of the problems they come across in their classes, but medical records are kept by medical staff. Existing facilities are entirely inadequate (clinics, etc.) Many teachers do not receive any assistance in recognizing problems in their classes. Medical staff provide some assistance with regard to health problems. Teachers require training in the use of screening instruments. Remedial teachers and special classes are regarded as essential in all schools. In addition social workers, medical personnel, psychologists and school nurses should be available for consultation with regard to identification and intervention procedures. Owing to class size (ranging between 50 and 70 pupils) teachers find it difficult to pay individual attention to children contending with difficulties.

- Teachers apply informal criteria for identification of the various impairments, e.g. general behaviour, physical appearance, speech, academic performance, command of the language, et cetera (Skuy et al. 1986 : 48 - 50).

6.7 THE SCREENING PROCESS

Tests used in other countries are evidently not suitable for black South African pupils. It was therefore necessary to develop a

screening instrument that could provide information on children's intellectual, sensory, social, and school-related modes of functioning. There is a need for a reliable questionnaire which teachers could complete fairly quickly.

A pilot study was executed to evaluate a screening instrument for poor academic achievers. A group of teachers were requested to rate children in their classes who were experiencing problems. An initial screening instrument with the following six subscales was devised:

- Language comprehension
- Expressive language
- Spatial and temporal orientation
- Anti-social behaviour
- Emotional behaviour
- School-appropriate behaviour

The reliability of these six subscales was determined (cf. Skuy et al. 1986 : 57-71).

6.8 DISCUSSION

6.8.1 Survey on attitudes, needs and identification techniques

- The most prevalent problems (according to teachers and medical personnel) are the following: slow learning, visual and hearing difficulties, hyperactivity, physical difficulties (concerning walking and movement), epilepsy, poor language skills and environmental deprivation (malnutrition and adverse home conditions).
- It is extremely difficult to communicate children's problems to their parents. Parents are not available and tend to dump the responsibility on the school.
- Some structured format is required to enable teachers to keep a comprehensive record on each child.

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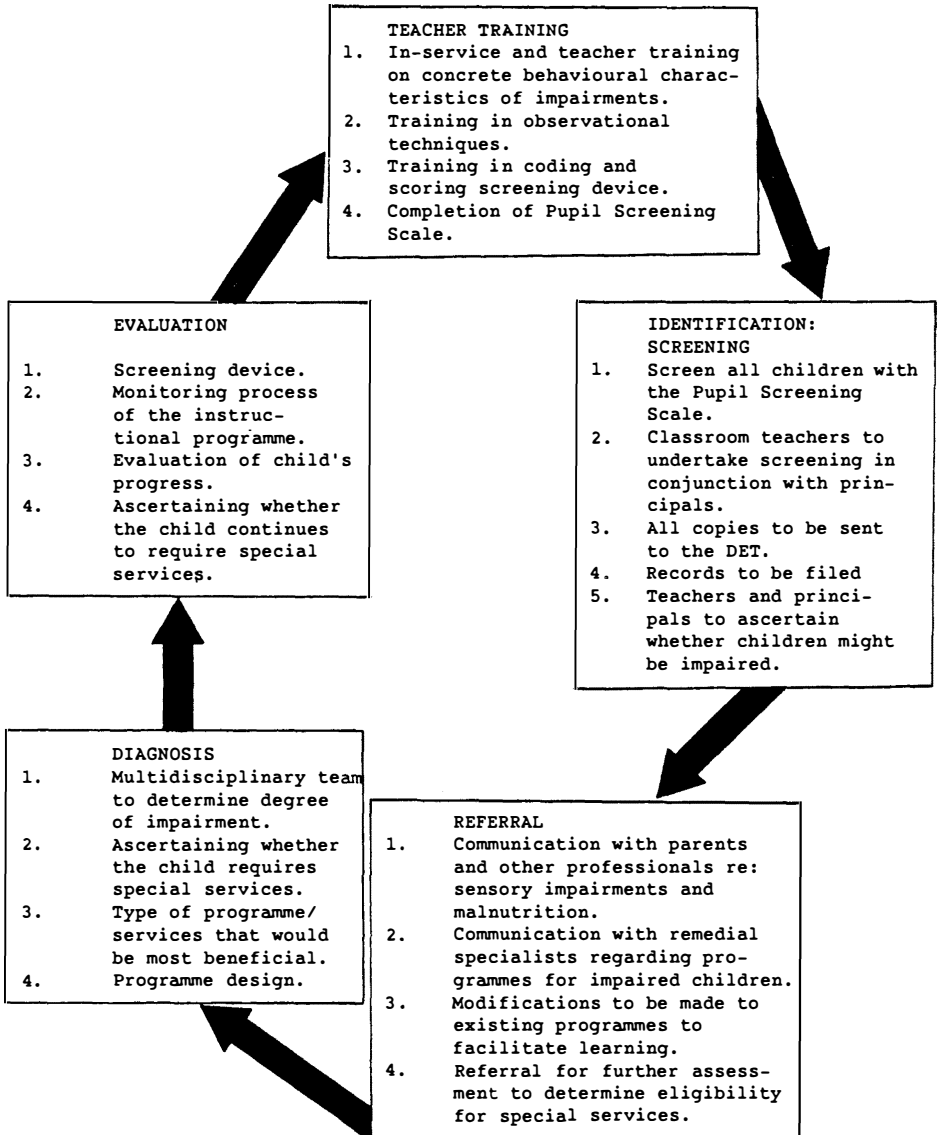
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- It is extremely difficult to communicate children's problems to their parents. Parents are not available and tend to dump the responsibility on the school.
- Some structured format is required to enable teachers to keep a comprehensive record on each child.

- The available facilities and provision for the impaired black population are severely inadequate. This also applies to trained personnel.
- Teachers receive little assistance in identification and intervention procedures with regard to their pupils suffering from problems and impairments, and find it very difficult to function effectively in this regard.

6.8.2 Recommendations

- A record is required on every child, indicating his scholastic progress, problems and impairments.
- A concerted effort is needed to make parents aware of their children's problems and of the importance of meetings with teachers in order to implement appropriate programmes.
- Communication should be increased among teachers, psychologists, psychiatrists, school nurses, social workers and remedial teachers.
- In-service and teacher training should be provided for all teachers on the characteristics which will enable them to identify possible impairments.
- Pamphlets and posters should be made available which describe the characteristics of the various impairments.
- Training should be given in observational techniques and completion of screening instruments for teachers, nurses and social workers.
- A standardized and easily administered screening instrument containing operational, behavioural characteristics of different impairments should be introduced.
- The following model for identification, diagnosis and evaluation of impaired black children is proposed (Skuy et al. 1986 : 77):

MODEL FOR IDENTIFICATION, EVALUATION AND
DIAGNOSIS OF IMPAIRED CHILDREN



- Through the use of the initial screening instrument it became apparent that pupils were experiencing severe difficulties with regard to scholastic progress (reading, writing, spelling, arithmetic), expressive language, school-appropriate behaviour, antisocial behaviour, emotional behaviour, et cetera.

- On account of deficiencies in the preliminary screening instrument, changes in the subscales as well as some of the items were necessary. Guided by those findings, the Pupil Screening Scale (PSS) was developed. This instrument measures fifteen dimensions (Skuy et al. 1986 : 81 - 89).
 - Vision
 - Hearing
 - Motor co-ordination
 - Health
 - Speech
 - Spoken language
 - Language comprehension
 - Spatial and temporal orientation
 - Social difficulties
 - Emotional difficulties
 - School-appropriate behaviour
 - Thinking skills
 - Reading difficulties
 - Difficulties in written language
 - Arithmetic difficulties

- A validation study of the PSS should be conducted in respect of all the subcultural groups in the RSA.

- The PSS is proposed as a cost-effective, interim measure to facilitate the initial identification of impairments by teachers and the keeping of records on individual children in the regular classroom, and to provide statistical data that could be made available to the Department of Education and Training.

- The PSS could be validated empirically for children of different races and communities.

- Screening should be taken as only the first step in the assessment both of the impairment and the potential of a child experiencing difficulties at school. A second evaluation phase is required, during which cognitive weaknesses and strengths could be identified. This procedure ought to be based on a model of dynamic assessment, not merely on psychometric test results.

CHAPTER 7

VOCATIONAL SUBJECT OBJECTIVES WITH A VIEW TO WORK PLACEMENT OF IMPAIRED BLACK PERSONS (Project No. 6)

7.1 INTERPRETATION OF ASSIGNMENT

The assignment given to the project committee read as follows: Determine the subjects and subject objectives of a broad curriculum for impaired black pupils, with a view to successful work placement of impaired blacks.

The research committee interpreted this assignment as follows:

Provision of a workable curriculum model for the education of impaired blacks, with a view to successful work placement and employment.

Such a model could be developed by means of

recommendations with regard to the broad curriculum, i.e. fields of study and subjects

on indication of the infrastructure required to implement the proposed curriculum model in practice.

It was not required to propose the particular subject content for the identified subjects since this would be the responsibility of the subject and education experts, at the request of the education authorities concerned (Steyn *et al.* 1986 : 3-4).

This project is per implication fundamentally concerned with curriculum development, which entails the following:

- situation analysis (needs analysis)
- formulation of objectives
- selection and grading of content
- developing and recommending didactic guidelines
- evaluation

Although it was not the aim of this investigation to develop a curriculum in full, it was necessary to make a situation analysis and to formulate objectives with a view to selecting content for the broad curriculum of education for impaired blacks (Steyn et al. 1986 : 4).

7.2 SITUATION ANALYSIS

The current situation with regard to education for impaired blacks in the RSA is as follows:

- Language differences complicate the accommodation of pupils from different ethnic groups in one school.
- A large percentage of the black population in the RSA are environmentally impaired and suffer poverty.
- Many impaired school leavers experience work placement problems.
- Educational provision for impaired black pupils at primary and secondary school levels is entirely inadequate with regard to infrastructure, number of schools, certification, location of schools, provision of personnel (including paramedics), parent involvement, transport, the accommodation of various impairments in one school, physical facilities, curricula, vocational training, language instruction, vocational guidance programmes, parent counselling, teaching resources, et cetera.
- Many impaired pupils either find themselves in mainstream education or have not yet received any education or training.
- There are long waiting lists for admission into schools for specialized education.
- Curricula mainly comprise conventional academic subjects. Vocationally oriented, practical and technical training is started too late.
- Restricted vocational opportunities and a high unemployment figure is prevalent among impaired blacks.

- Problems exist with regard to early identification, evaluation, referral and placement of impaired black children.

7.3 FORMULATION OF EDUCATIONAL OBJECTIVES

The overall objective of education for the impaired black child is preparation for life, to assist him towards reaching proper adulthood (with due allowance for his impairment). Proper adulthood essentially entails the following:

- a meaningful existence
- human dignity
- identification with norms
- self-evaluation and self-concept
- independent moral decision making and acting
- responsibility
- own philosophy of life

The general aim of education for the impaired therefore is the same as that of education for the unimpaired.

Particular aims of education for the impaired child are the following:

- optimum realization of available potential (despite the restrictions of the particular impairment)
- optimally independent functioning and where it is possible, making a useful contribution to the community
- acceptance of the impairment, practically and effectively living with it (active acceptance of the impairment, a positive self-concept and optimum self-actualization)
- vocational education with a view to successful employment
- eventual effective work placement.

Educational aims of vocational education for impaired black persons are as follows:

- to provide for the scientific, mathematical and technical development of pupils
- to develop and inculcate in pupils those skills required by modern society
- to provide pupils with the opportunity of exploring various occupational options to enable them to make a responsible choice regarding a future occupation
- to assist pupils in the transition from a traditional culture to a competitive technoculture
- to provide vocational guidance to pupils.

7.4 SELECTION, GRADING AND STRUCTURING OF CONTENT

When selecting and arranging the content of a broad curriculum (the subjects and fields of study), the following factors should be taken into account:

- the curriculum should meet the needs of the community (the demands, philosophy, et cetera, both of the black community and particular occupations).
- the curriculum should meet the needs of the impaired black person (actualizing potential, following an occupation).
- the curriculum should meet the manpower needs of the country.
- the curriculum should be functional (teaching vital skills, vocationally directed)

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- the curriculum should meet the manpower needs of the country.
- the curriculum should be functional (teaching vital skills, vocationally directed)

- the curriculum should be fundamental (the "tools" for coping with the demands of living include interpersonal efficiency, independence, a minimum academic knowledge, adjustment to the work environment, et cetera).

7.5 PROBLEM STATEMENT

General: What should the broad curriculum for impaired blacks be, in order to achieve more successful work placement and employment?

Specific:

- Which occupations do impaired blacks currently have access to?
- Which occupations may impaired blacks have access to in future?
- What are the minimum entrance requirements of these occupations?
- Which fields of study would provide access to the identified occupations?
- Which subjects should be included in these fields of study?
- To what extent could existing curriculum models be adapted to suit education for impaired blacks?
- What are the implications of the proposed curriculum model for, inter alia, educational provision (physical facilities, personnel, et cetera) and certification?

7.6 RELEVANCE OF THE INVESTIGATION

- Educational provision for impaired blacks is inadequate.
- Vocational training has not yet become a reality.

- Impaired blacks experience difficulties concerning work placement. The prognosis appears to be extremely negative and an investigation on vocational training as a possible means of improving the impaired black's work placement prospects, is urgently required.

7.7 PREMISES

The principles on educational provision as indicated in the White Paper on the Provision of Education in the RSA (1983) as well as the National Policy for General Education Affairs Act (Act 76 of 1984), serve as basic premises.

Other aspects taken into consideration as supplementary points of departure are the following (Steyn et al. 1986 : 33-34):

- The existing model of education for impaired whites
- The proposed new approach of the Department of Education and Training toward vocational training
- The principle of nine years' compulsory education contained in the White Paper
- The needs of the impaired
- Manpower needs of the RSA
- Existing and future vocational opportunities for impaired blacks
- Cost-effectiveness of recommendations
- Inadequacy of prevocational training in the existing model of education for impaired blacks
- Vocationally directed training should not be over-emphasized at the expense of general formative academic education

- The recommendations contained in this report should serve as a point of departure for further research and detailed developments with regard to education for the black impaired
- Only the following categories of impairment were attended to in this investigation: hearing impairment, visual impairment, neural impairment, physical impairment and intellectual impairment.

7.8 AIMS OF THE INVESTIGATION (Steyn et al. 1986 : 34-35)

7.8.1 Primary aim

The identification of certain broad course curricula (fields of study and subjects) that could contribute to the vocational readiness of impaired blacks.

7.8.2 Secondary aims

- The identification of occupations and postschool fields of study currently open to impaired blacks
- The identification of occupations and postschool fields of study that probably will be open to impaired blacks in future
- Determination of the minimum entrance requirements for such occupations and postschool fields of study
- Selection of content for a broad curriculum (fields of study and subjects) that will provide access to the identified occupations and postschool fields of study
- Particularization of selected existing curriculum models of education for impaired blacks
- Determination of the possible implications of the proposed curriculum model for, inter alia, educational provision and certification.

7.9 COURSE OF RESEARCH

The researchers on the project gathered information by means of interviews, a questionnaire, literature study and visits to schools for specialized education. The data obtained was integrated.

7.10 FINDINGS AND RECOMMENDATIONS

7.10.1 General findings

(1) Finding 1

Timeous identification, followed by referral and placement of impaired blacks in an educational situation that could meet their unique needs, are entirely inefficient at present.

(a) Discussion

- Many impaired black children enter school at a late stage, while a large number receive no education or training. For various categories and degrees of impaired people, specialized assistance starting at the preschool level is a prerequisite for successful education and eventual success in an occupation.
- The infrastructure necessary for the identification, referral, and placement of impaired blacks, is largely inadequate.
- The prevailing ignorance in the black community has the effect that impaired children are often not recognized as children with special educational needs.

(b) Recommendations

- The community should be made aware of the unique needs of the impaired.
- The infrastructure required to facilitate timeous identification, referral and placement of impaired blacks should be created.

(c) Implications

- Launching an information campaign particularly aimed at parents, medical and paramedical personnel to make them aware of the necessity for timely identification of impaired black children.
- Establishment of criteria for the identification of the various categories and degrees of impairment.
- Establishment of a standardized procedure for the identification, referral and placement of impaired blacks.
- Inclusion of an introductory course on the identification, referral and placement of the impaired in the training of all teachers, medical and paramedical personnel.
- The training of specialized auxiliary service personnel to deal with the identification, referral and placement of impaired black children within the school situation.
- Research on the provision of an effective infrastructure for the identification, referral and placement of impaired black children.

(2) Finding 2

The principles of differentiation to accommodate the various categories and degrees of impairment are not efficiently applied in the existing system of education for impaired black children.

(a) Discussion

- Each category and degree of impairment requires a particular educational approach on account of its uniqueness.
- Children with different categories of impairment are accommodated in one school.

- Differentiation in terms of the various categories of impairment is inadequate.
- Certain occupations are more open to persons with specific categories and degrees of impairment than others.

(b) Recommendation

Differentiation in terms of the various categories and degrees of impairment should be adequately realized to promote successful education for, and the eventual employment in, an occupation by impaired black persons.

(c) Implications

- The implementation of the preceding recommendations on the timeous identification, referral, and placement of impaired black persons (this is a precondition for differentiation to be realized in the educational context).
- Implementation of parent guidance programmes to create an awareness among parents of impaired children with regard to the necessity for, and possible ways of, applying differentiation in their own educational efforts with these children.
- Improved provision of education in comprehensive and/or separate schools for each respective category and degree of impairment wherever possible or necessary.
- Provision of education in separate classes at existing schools until the necessary infrastructure for an alternative model has been established.
- Establishment of courses at training institutions for the full-time or part-time training of specialized teaching and auxiliary personnel, for each category of impairment.

- Intensive in-service training of selected members of staff until such time as qualified specialists become available.
- Ongoing personnel development.
- Research on the establishment of an educational infrastructure within which the principle of differentiation could be fully realized.

(3) Finding 3

Work preparation programmes are still seriously lacking in the curriculum for impaired black children.

(a) Discussion

- The black person from a traditional background is totally unfamiliar with the Western work ethos.
- When impaired persons fail in their occupations, it could often be attributed to their inadequate work orientation despite their having undergone reasonably adequate vocationally-directed training.

(b) Recommendation

The compilation, implementation and evaluation of work preparation programmes deserve a high priority in the curriculum for impaired blacks.

(c) Implications

- Research on the compilation, implementation and evaluation of work preparation programmes should be initiated as soon as possible.
- In-service training should be offered to selected teaching and auxiliary service personnel, to implement such programmes.
- The physical facilities required for the implementation of such programmes should be provided.

- All teaching and auxiliary service personnel (in the context of mainstream education as well as therapeutic interventions) should be advised of their responsibility to prepare impaired pupils for a work situation.

7.10.2 Specific findings with regard to each category of impairment

(1) Hearing impairment

(a) Finding

With a view to their eventual successful work placement and employment, the hearing impaired are particularly dependent on vocational education.

(b) Discussion

On account of his communication impairment, training opportunities apart from formal specialized education are extremely limited for the hearing impaired person. It is essential that the hearing impaired school leaver should be exceptionally well prepared to enter the labour market. Hence, the recommendations concerning the broad curriculum for hearing impaired blacks are focused on the more vocationally directed fields of study and subjects.

(c) Recommendations

Recommendations with regard to the broad curriculum (fields of study and subjects) for secondary education for hearing impaired blacks, and the implications thereof, are indicated in detail in Appendix C (Steyn et al. 1986 : 42-47).

(2) Visual impairment

(a) Finding

Study and work placement statistics indicate that a large number of occupations is open to the visually impaired, on condition that their

curriculum be composed as to provide them with the necessary vocationally directed training and/or preparation for further study.

(b) Discussion

Several visually impaired persons have already been placed successfully in occupations with varying minimum entrance requirements.

(c) Recommendations

Recommendations with regard to the broad curriculum for secondary education for visually impaired blacks, and the implications thereof, are indicated in detail in Appendix D (Steyn et al. 1986 : 48-57).

(3) Physical impairment

(a) Finding

Fields of study and vocational opportunities for the physically impaired are chiefly similar to those for the unimpaired, excepting where immobility or malfunctioning of the limbs, as well as factors such as secondary epilepsy and secondary visual or auditory problems, would disqualify any person.

(b) Discussion

Fields of study represented at schools for the physically impaired are mainly of a commercial, technical, scientific and general nature. In many cases the curricula are identical to those for the unimpaired, although the subject packages (sets) offered may differ in respect of variety.

(c) Recommendation

The broad curriculum for secondary education for physically impaired blacks can largely resemble that for the unimpaired. A balance should be maintained between general formative academic education and general formative vocational education. The curriculum for the Open-air

school in Durban (see Appendix E) could probably serve as an example with regard to a curriculum for physically impaired black pupils (cf. Steyn et al. 1986 : 61-67).

(4) Neural impairment

(a) Finding

Experience has proved vocational education to be essential for the eventual successful work placement and employment of the neurally impaired. On account of the diversity in the potential and deficits of the neurally impaired, however, it is well-nigh impossible to compose a generally applicable curriculum for these pupils.

(b) Discussion

Prevocational training is provided at all the schools for neurally impaired whites. Although the work placement of certain categories of neurally impaired persons is very problematic, others are successfully placed, either in the open labour market or in sheltered employment. Some of the neurally impaired are accommodated in after-care centres. As previously indicated, educational provision for neurally impaired blacks is entirely inadequate and they have to follow the mainstream curriculum without any differentiation with regard to their unique needs.

(c) Recommendations

Recommendations with regard to the broad curriculum for secondary education for neurally impaired black pupils, and the implications thereof, are contained in Appendix F (Steyn et al. 1986 : 61-67).

(5) Intellectual impairment

(a) Finding

The black child with a mild intellectual impairment (intelligence score 50-70) requires a broad curriculum in which a balance is all the

time maintained between general formative academic education and general formative vocational education. His innate potential must be developed to the optimum so that he could eventually be placed in a job successfully.

(b) Discussion

Bearing in mind the slow rate at which the intellectually impaired learns and develops, it is necessary to guard against premature specialization in one particular field at the expense of balanced development of his total potential.

Vocational opportunities are often extremely restricted for these pupils. Attempts should therefore be made to prepare them for as many related occupations as possible, despite their limited potential. A curriculum for the intellectually impaired should also focus on helping them to be accepted by other members of the community and to acquire a sense of human dignity.

(c) Recommendations

Recommendations with regard to the broad curriculum for "secondary" education for intellectually impaired blacks, and the implications thereof, are contained in Appendix G (Steyn et al. 1986 : 69-74).

7.10.3 General implications

The following implications have an overall bearing on the broad curriculum for secondary education recommended for each category of impairment (Steyn et al. 1986 : 74-77):

- The implementation of the recommendations in 7.10.1 is a precondition for the successful implementation of the recommended broad curriculum for the education of impaired black children.

- An information campaign should be launched to make the black community aware of the necessity for, and potential of, more vocationally directed training in the schools as well as in other settings.
- Individual pupils' training potential should be ascertained as early as possible.
- It is anticipated that the model for vocational education would include the following phases:

- (1) Technically formative phase: Substandard A to Standard 4 (year level 1)

During this phase, the life skills required by modern society and which are useful in forming a base for subsequent vocational education, are inculcated. This could be achieved by means of a subject "skills and techniques", comprising activities such as arts and crafts, woodwork, sewing and elementary computer skills.

- (2) Transitional phase: Standard 5 (year level 2)

During this phase the skills and techniques acquired in the preceding technically formative phase, culminate in the mastery of basic skills underlying technical work, such as the care and handling of tools, measuring, marking, sawing, filing, sanding, drilling, riveting, soldering, welding, et cetera. Girls should master the most appropriate skills of those mentioned above, as well as the fundamental skills of cooking, sewing, housekeeping, office work, hairdressing, et cetera.

- (3) Exploratory phase: Standards 6 and 7 (year levels 3 and 4)

Pupils in this phase are introduced to a wide spectrum of vocationally directed fields of study to gain knowledge and mastery of those skills which are common to a whole "family" of allied occupations. Pupils intending to leave school at the conclusion of this phase (after nine years' compulsory education) to enter the labour market, should specialize in at least two specific, vocationally-oriented fields of study during this phase.

(4) Specialization phase: Standards 8 to 10 (year level 5)

Specialized, accredited training in a specific vocational direction during this phase, serves as preparation for entering an occupation.

- Close liaison should be established between schools and the surrounding industries, so that the curriculum could be particularized according to the nature of those industries. The three years of compulsory training following the six years of compulsory schooling could possibly be completed at those industries.
- The details of the curriculum should be designed in accordance with the needs and nature of a particular environment. Profitable home industries could develop in this way, for example tallow-chandlery in an area without electricity.
- The proposed broad curriculum should as far as possible be particularized in terms of the individual pupil's potential and needs.
- The facilities required for presenting the proposed, more vocationally directed training should be gradually provided, while taking the availability of funds into consideration.
- An effective vocational guidance service with adequately qualified personnel should be established, to assist pupils (with, inter alia, their choice of occupation and job applications) and to monitor the vocational progress of former pupils.
- Specialized teaching staff should be trained to present the more vocationally oriented subjects.
- Selected members of the teaching staff must receive intensive in-service training, until such time as qualified personnel become available.
- The skills of trained artisans should be employed until such time as adequately qualified teaching staff become available.

- On-going personnel development should be pursued.
- The creation of the infrastructure necessary to implement the proposed broad curriculum, should be researched.
- The feasibility of a modular curriculum should be considered, which could make it possible for pupils to progress according to their own potential and rate and to move from one level of education to the next with relative ease.
- Relevant curriculum materials, such as teacher manuals, text books, standardized tests and teaching aids, should be developed.
- On-going curriculum evaluation should be regarded as essential.
- Research is required on the official certification of training on all levels.
- Research is required on the accreditation of all training institutions.

7.11 FINAL CONCLUSION

Vocationally oriented training is fundamentally concerned with the quest for the most valuable knowledge and skills. The answer lies in effective vocational training. If this holds true for mainstream education, then it is equally true with regard to the impaired black pupil. One of the primary needs of the impaired youth is that for vocational training.

CHAPTER 8

NON-FORMAL EDUCATION FOR IMPAIRED BLACKS BEFORE TWENTY ONE YEARS OF AGE (Project No. 7)

8.1 FORMULATION AND INTERPRETATION OF ASSIGNMENT

Vocational training for impaired black children in the RSA is inadequate. Non-formal educational facilities could alleviate this problem considerably. Non-formal education is any organized, systematic educational activity performed outside the framework and prescribed syllabuses of the formal education system. Investigating how the impaired black person could acquire vocational skills by means of non-formal education, is a subtheme of this study. The impaired black school leaver is often inadequately prepared for coping within the "new" vocational environment. Two questions arise in this regard, namely:

- How should the non-formal training situation create an environment in which the child would be independent in terms of his personal care, so that vocational training could proceed successfully?
- What opportunities does non-formal education provide to the child in terms of getting to know the resources existing in his community and how could he use them in order to adapt to his new working environment independently on completion of his training?

The child should get to know these resources also in an informal way. Informal education is the lifelong process by which every person acquires and accumulates knowledge, skills, attitudes and insights from daily exposure to the environment - at home, at work, at play, from the example of family and friends, from travel, reading newspapers and books, or by listening to the radio or watching television.

The impaired person should acquire the skills of independent personal care before he can be vocationally independent. The relation-

ship between independent personal care and work skills forms the central problem of the study at hand.

8.2 ORIENTATION

Impairment means impeded activity in play, personal care, occupation and/or recreation and also a hindrance with regard to personal development and the quality and degree of basic human abilities. The acquisition of skills is slowed down and hampered. Each impaired child should be evaluated and assisted with regard to his impairment, to provide him with the maximum development opportunity towards independent adulthood. All adults should have a philosophy of life, a sense of responsibility, independent personal care skills, optimal vocational skills, et cetera.

8.3 PROBLEM STATEMENT

How should the impaired adolescent be trained to become an independent worker? Each category of impairment poses its own unique problems with regard to education, personal care, recreation and employment. It is the aim of this study to examine whether a method of syllabus design which would integrate vocational assessment, training and placement techniques could be devised. The Humphrey System is examined in this regard. In this system jobs are broken down into their elements, in order to establish assessment and training criteria.

The impaired individual should receive training with regard to the following:

- independence and personal care (life skills)
- recreational education (also with regard to social requirements)
- religious and civic life

The impaired does not always have adequate opportunities to develop these skills informally. Informal learning opportunities should deliberately be planned and created for him. Many of the impaired

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- independence and personal care (life skills)
- recreational education (also with regard to social requirements)
- religious and civic life

The impaired does not always have adequate opportunities to develop these skills informally. Informal learning opportunities should deliberately be planned and created for him. Many of the impaired

thus have a lifelong need for medical, educational and social services.

Impaired blacks in the RSA urgently require these services as well as vocational training and opportunities. Figures indicate that 12,7 % of our population are impaired, which would suggest that 74,500 impaired black children are school leavers each year.

8.4 PREMISES

- Although vocational training is emphasized, the primary concern is for the child and his education and nurturing. This implies that the child should be educated in accordance with the principles of a view of life, in the school situation also. Vocational training should not be over-emphasized at the expense of the general formative education of the child.

- The child should meet certain requirements before he is admitted to non-formal training, for example with regard to academic skills, independent personal care, social skills, et cetera. The purpose of this training is the acquisition of vocational skills as well as personal independence. For this purpose the curriculum design, vocational assessment and vocational placement should be adequate. Problems surrounding the education of the impaired child further demand a multidisciplinary approach.

8.5 AIMS OF THE INVESTIGATION

- Within the structure of non-formal training, to investigate means of assessing, training and placing the impaired black child; to investigate the *possibility of synchronizing* vocational assessment and training; *to determine the personnel requirements with regard to managing such placements.*
- To investigate the need for informal training supportive to vocational training and the staff requirements for such training.

- To investigate the most appropriate siting of training centres.

8.6 COURSE OF RESEARCH

Relevant educational acts and existing services were examined; interviews were conducted with officials, school principals and consultants; a comprehensive study was made of the relevant literature; questionnaires were distributed, et cetera.

8.7 DATA OBTAINED FROM LITERATURE AND QUESTIONNAIRES

- Human resources (the energies, skills, talents and knowledge of people) can be optimally utilized and human potential can be optimally developed through education and (vocational) training.
- Vocational training should focus on employment opportunities in the particular environment. Compare, for example, the requirements of modern technology to those of traditional farming.
- Advantages of non-formal education are the following: it provides learning opportunities outside the formal situation (e.g. training for a specific occupation); it could replace formal education (the private sector could provide training to meet their own employment needs); it could serve as an extension of formal education (e.g. refresh skills); it could provide education where no other education is available; it could help people with no previous training to get employment; it accommodates new developments and change more rapidly than formal education.
- Non-formal training could also provide in the following: educational needs, the need for compensatory education, manpower needs, the need for vocational skills, improved quality of living, achievement of development objectives, retraining.
- The training centres of the Department of Manpower have a highly successful training system. In these centres special attention is given to knowledge, practical skills and work attitudes. Training

is brief and focuses on the needs of both the employer and the employee. This system is based on a work situation analysis and training with regard to each component of a task (cf. Murray et al. 1986 : 39-50). Assessment is performed in accordance with task criteria.

- The report refers to legal aspects of non-formal education, e.g. concerning norms and standards for syllabuses, examinations and certification; equal educational opportunities and other principles for educational provision; recommendations in the White Paper such as the one with regard to a bridging module; entrance into non-formal further education after completion of compulsory education; vocational training (cf. Murray et al. 1986 : 50-56).

- With regard to the synchronization of assessment, training and placement, it is stated that training within the work rehabilitation system in the RSA is largely wanting - assessment, training and placement fail to interlink. Vocational assessment mainly comprises medical and occupational therapeutic reports, and a report from an official of the Department of Manpower. Psychologists, physiotherapists, speech therapists, teachers, social workers and medical specialists are often involved as well. This assessment includes: psychological tests (intelligence, aptitude, et cetera), vocational assessment and assessment by an occupational therapist. The latter assesses both the basic potential and the specific work potential of a person. Systems of work simulation are used (elements of a task being duplicated in the testing situation). An example of such a system is the Humphrey System (Murray et al. 1986 : 61-65), where a person receives vocational training with regard to the respective elements of a task, and his performance is consequently also evaluated with regard to the respective elements.

- On the subject of vocational placement, findings are the following: accurate testing, well-informed job selection, thorough training and adaptation of the work environment to the impaired person are pre-conditions for vocational success. Vocational placement is not approached scientifically in the RSA. The multidisciplinary team

has an important function with regard to the assessment, training and work placement of the impaired. In the Humphrey System information with regard to specific vocational tasks is stored. This information is used for assessment, training and placement. Factors that should be taken into account during work placement are the particular task, the job environment and the community with regard to which the potential employee should be able to function independently.

- The report provides an overview of the support structures which could be utilized by the impaired in order to function independently (Murray et al. 1986 : 74). With regard to the impaired, career education refers to the process through which all school, family and community components are systematically co-ordinated for an individual to realize his economic, social and personal potential. Career education concepts include the following: life-long education towards total individual development, knowledge and skills to master the environment, the total curriculum of the school, a focus on all life roles and situations, responsibility and co-operation, informal learning, vocationally oriented subject matter, parent and community involvement, open communication, et cetera (cf. Murray et al. 1986 : 77-83). Furthermore, a model is presented for incorporating an employment system with a community system (Murray et al. 1986 : 84), as well as detailed reports on vocational assessment, training, guidance, and placement surveys (Murray et al. 1986 : 87-115).

8.8 RECOMMENDATIONS, DISCUSSION AND IMPLICATIONS

- The literature supports the concepts of education from childhood to adolescence, vocational objectives in schools and education via formal and non-formal avenues.
- The current education system cannot accommodate the need for vocational training. There is a lack of trained personnel, training programmes, funds and infrastructures with regard to provision of the required training.

- Non-formal training at a secondary school level should be introduced into the system of specialized education for blacks. The training period should not be less than three years. Syllabuses should be adapted to existing commercial and industrial needs.
- There should be closer co-operation between paramedics and teachers. Teachers should have a better understanding of the existing relation between impairment problems and work activities within the community. The occupational therapist, psychologist and social worker play an important part with regard to the impaired person's work and independence in the community. In order to become an independent individual, the impaired should get to know his own potential, and the school should provide him with this opportunity.
- Research on the synchronization of vocational assessment, training and placement is essential and the private sector should be approached to assist in financing such research.
- Non-formal vocational education is a feasible option; the techniques for providing highly successful methods of assessment and training, have already been developed. A work placement system yet needs to be designed in the RSA, but it is imperative that work placement be synchronized with assessment and training.
- The impaired child should, in the process of his development, be guided towards independence both in the school and in the community, i.e. in his development from primary school to employment within the community.
- Informal training also has a role to play in guiding the impaired adolescent towards independent personal care and self-reliance, by providing information on resources for countering difficulties and finding solutions to problems, et cetera.

Based on the findings of the investigation, the following recommendations are offered:

8.8.1 Recommendation 1

Non-formal vocational training should be institutionalized. Non-formal training on the levels of unskilled and semi-skilled labour should be extended to include impaired black children. Such training should not form a part of, but should rather supplement the primary school programme. The training period should not be less than three years.

(1) Discussion

Currently, the training as recommended is provided only in sheltered workshops. Furthermore, there are insufficient workshops to provide this training. Specialized schools at the primary level would like to provide this training, but they lack the required facilities.

(2) Implications

Facilities and personnel should be provided for non-formal training. The teaching staff of primary schools would be relieved of the frustration of having to provide a service for which they are not equipped. The main objective would be to prepare the child for the secondary school (academic or technical) or for non-formal education. The fifteen-year-old would no longer have to remain in the primary school - he would be provided the opportunity of developing his work potential.

8.8.2 Recommendation 2

The facilities of schools for the impaired should be expanded to accommodate non-formal training. Such facilities should have their own deputy principal and staff, but should be part of the school in every other respect.

(1) Discussion

The placement of such training facilities could involve several options, including

- an independent facility
- being incorporated in a facility for adult non-formal training
- being incorporated in a non-formal training school for all categories on the impaired/unimpaired continuum
- being incorporated in a school for specialized education

With regard to the second option, it should be borne in mind that the recommendation concerns children who still require an education and who could not readily be accommodated in an adult training facility. The third option has the advantage that it implies more exposure to, and an opportunity for integration with, the unimpaired community. Proponents of mainstreaming should find this desirable.

Incorporating non-formal training in the existing schools would imply the optimum utilization of facilities and space. Special provision would be expanded for all impaired children and the necessary administrative infrastructure would already be available. Welfare societies would probably sponsor such an arrangement more readily.

(2) Implications

The deputy principal in charge of such a facility would have the freedom to draw up syllabuses in line with the needs of the environment. He and his staff would be part of the school. Teaching staff and facilities could be shared.

8.8.3 Recommendation 3

An instruction programme based on work simulation models should be introduced in training centres. The simulation should be of work available in the area served by the school. Such work simulation should be representative of high technology or subsistence economy, or of the levels in between.

(1) Discussion

There is evidence from both the literature and the questionnaires that work simulation programmes are highly successful. The staff involved should know and understand the techniques of work simulation.

(2) Implications

Primary, secondary and training institutions could be housed on one property and could be administered by one school principal. The principal should possess extensive training and experience and should be an astute manager as well as educationalist. This should be a cost-saving operation.

8.8.4 Recommendation 4

Children should be accepted into non-formal training programmes, their age notwithstanding; they should be independent in respect of their personal care within the school system; if they are unable to pursue academic or technical education, they should acquire basic work habits and be motivated to work. Pupils over the age of fifteen should be prepared for the work situation by means of occupational therapy if necessary, prior to being accepted into non-formal training programmes.

(1) Discussion

In view of children's varying rates of development, it is not feasible to prescribe an age at which a child should move from primary to non-formal training. A child should, for example, first acquire a concept of himself as a worker. A child who has never attended a school, should, upon reaching working age, be accepted for non-formal training.

(2) Implications

The principal and deputy principal in conjunction with the staff, the psychologist and the occupational therapist should decide which pupils are ready for non-formal training. They could form a committee for this purpose. Children considerably younger than fifteen, but too old to start school, pose a problem that requires further attention. Children impaired later in life could be accepted, provided that they have attained the prerequisite levels of independence and work habit. These children could acquire the prerequisite skills by means of bridging programmes.

8.8.5 Recommendation 5

Non-formal training should be integrated with assessment and placement. The non-formal vocational training programme should be based on work simulation syllabuses; assessment and placement procedures should likewise be based on work simulation techniques. The relevant techniques should be managed by trained professionals.

(1) Discussion

Specific professionals are involved in the selection for non-formal training. In several Western countries the occupational therapist, in particular, plays a prominent role. The psychologist is also deeply involved. The occupational therapist could, for example, assist in the assessment, training and placement of up to 30 pupils per year. He should function as a member of the school staff. A school with 100 or more school leavers per year requires the services of a placement officer who is acquainted with the area and its job potential.

(2) Implications

- The teachers, occupational therapists and placement officers should collaborate to develop schemes of work for assessment, training and placement.

- The feasibility of an integrated system should be researched.
- The potential of private financing should be investigated in order to involve private employers.
- Rural areas would probably have to do without the above-mentioned services for quite some time.

8.8.6 Recommendation 6

Personal and vocational independence should also be attained by the impaired by means of informal education. Opportunities should be created for the informal development of the children, to function independently within the community. Information should be supplied with regard to the resources available in the community that would promote independence. The impaired should be granted the opportunity to experiment with the various resources.

(1) Discussion

It should be borne in mind that, developmentally, these children are in the adolescent phase, a critical period in respect of independence. The need for emancipation should be taken into account. The youth desires to make his own choices, including that of a career.

(2) Implications

The staff (and in particular the occupational therapist) should keep contact with the local community and be acquainted with the available resources. The social worker could co-operate with the occupational therapist in this regard. The pupil should be granted the opportunity to move out into the community on his own. The infrastructures to achieve this, should be created (e.g. by organizing transport). Information should be provided that would enable the child to make "educated" career choices, and to endeavour to find employment on his own. This would require the closest possible

professional collaboration among teachers/instructors, occupational therapists, psychologists and placement officers. Relevant information brochures and other material would have to be collected.

8.8.7 Recommendation 7

Audio-visual programmes should be developed: SABC programmes, defining resources in the RSA which could facilitate independence in the rehabilitation of the impaired should be developed in collaboration with the South African Federal Council for the Rehabilitation of Disabled Persons, the Disabled People of South Africa (DPSA) and schools for specialized education. Such programmes should advertise work opportunities to training institutions and should be made available for the informal training of impaired persons as well as the formal training of the relevant professionals. This programme should be adapted to accommodate the impairments and to suit the intellectual level of the target audience (for example the deaf and the intellectually impaired).

(1) Discussion

Such programmes are of general interest in that they could educate the general public with regard to the vocational options as well as make them aware of the fact that the impaired can also function independently. These sources of information would cultivate informed participants in the community. Institutions actively involved with the impaired (councils, schools) should be consulted when such programmes are devised, since they are best acquainted with the needs of the impaired. Vocational programmes should develop in the worker an understanding of the system of which he is a part.

(2) Implications

In order to present appropriate programme material, research would be required to establish which facilities already exist. This in itself would be of inestimable value to centres providing assistance to the impaired.

8.9 APPENDICES

Appendices on the following are included in the report:

- a questionnaire with regard to non-formal education for blacks at schools and centres (assessment, training and placement);
- schemes of work for relevant courses, and
- work simulation procedures to determine work capacity (the Humphrey System).

CHAPTER 9

THE PRESENT AND FUTURE ROLE OF MASS MEDIA WITH REGARD TO IMPAIRED BLACKS (Project No. 8)

9.1 PROBLEM STATEMENT (Stander 1986 : 1-2)

- The way in which the media, i.e. radio, television and the press, audibly and/or visually represent the impaired child and his cause, is largely unco-ordinated, lacking a holistic educationally substantiated approach and a particular central strategy with regard to the various categories of impairment.

- The media handle this representation of the impaired child largely in isolation of the various official institutions of formal specialized education and their agents such as, inter alia, statutory national councils and the diverse associations.

- In practice, this isolation often causes press reports and actuality broadcasts on the radio and television to be based on data that are either outdated or incorrect.

- The sensational approach that is so frequently characteristic of actuality broadcasts and, more particularly, press reports, not only causes a lack of overall perspective, but is also offensive and embarrassing for the parents and the impaired child himself. Prototypes are often portrayed out of context and unrealistic representations sometimes raise unfounded hopes in the parents and the child.

- There is no central resource centre or clearing house whatsoever, where reliable information could be obtained quickly and efficiently.

9.2 PREMISES (Stander 1986:2)

- The media, television in particular, are extremely important in the presentation of the impaired child's cause and the representation of his image to the public.

- The education of the impaired child forms an integral part of education as an organic whole, and may not be fragmented or isolated.
- In view of this fact, it is of crucial importance that all the agents involved in the education of impaired children should have an orchestrated approach, including the agents beyond the formally organized sector of education - even, for example, the traditional African doctor and the spiritual healer. In this manner overlapping, confusion and counter-productivity could be prevented.
- In principle, the impaired child's need for the optimum development of his potential is no greater or less than that of his unimpaired counterpart, although it may be different.
- The education and training of the impaired child is the joint responsibility of the State, organized education and the private sector, the latter including the media. Each of these sectors should be clear on his involvement with regard to task, role and content, as well as the particular description of objectives.
- The needs of the impaired child should in every case be understood, translated and interpreted within the specific ethnic context that applies.

9.3 AIMS OF THE INVESTIGATION (Stander 1986:3)

- To determine the present and future role of the media in promoting the cause of the impaired black child, while bearing current operations in formal, non-formal and informal education in the RSA constantly in mind. The objective would be hereby to improve mutual collaboration for the sake of upgrading the impaired child's quality of life, and parent guidance.
- To identify deficiencies in the current contributions and activities of the respective media, with a view to their possible elimination.

- To provide guidelines for future collaboration of all interested parties, with regard to content and organizational structure.

9.4 COURSE OF RESEARCH

The research mainly comprised the following: Identification and gathering of information on the media, media contacts, expert respondents, institutions involved with impaired children; designing a questionnaire on views regarding impairments in children; a small-scale empirical investigation (questionnaire to experts and the media), et cetera.

9.5 FINDINGS (Stander 1986 : 6-12)

9.5.1 Finding 1

What the experts on impaired children expect from the media:

Experts on specialized education regard the principal function of the media to be the education of the general public and the promotion of an acute social awareness with regard to the needs, aspirations and problems of adjustment of the impaired black child. An increased involvement and empathy should be attained in the community, instead of an aloof attitude of pity or stigmatization.

(1) Elucidation

The media are expected to call the public's attention to their responsibility towards the impaired in terms of prevention, after-care and continual support; to constructively avert existing myths and various traditional superstitions by supplying accurate information, and to improve the quality of understanding towards the impaired child.

(2) Recommendation

The media should, in an ethically responsible way, project a positive image of the impaired child and his potential, in order to

enhance his acceptability and thus promote his active integration into both the general and the vocational community.

(3) Implication

The media should - collectively and individually (in terms of the respective sound, vision or text medium), and according to a scheme approved by experts - direct their promotional influence on the primary, secondary and tertiary sectors of education, i.e. the home, school, general public, legislation and research community. Such promotion should take place in close collaboration with other agents and interested parties, in order to ensure efficiency and co-ordination of the various ventures. Parents and the general public will have to be informed on causing factors and preventive measures. Inadequate facilities should be sympathetically exposed and the efforts of welfare organizations should receive supportive publicity.

9.5.2 Finding 2

What the experts on impaired children expect the media not to do:

Experts in specialized education find it problematic and unacceptable for the media to venture into issues concerning assessment, diagnosis and prognosis.

(1) Elucidation

Assessment, diagnosis and prognosis of impairments in children is a specialized field requiring advanced expertise and scientific judgment. This is particularly true for the highly sensitive field of prognosis which, if handled incorrectly, could give rise to unrealistic expectations or unnecessary pessimism among parents and children.

(2) Recommendation

It is recommended that the media should steer clear of assessment, diagnosis and prognosis and rather focus on more general topics such as prevention and safety.

(3) Implication

The media should design a mechanism, internally and in conjunction with experts, whereby reliable information could be cleared and monitored, especially in the case of reviews on sensitive topics.

9.5.3 Finding 3

What the experts on impaired children regard as high priority areas for media involvement:

The facets of impairment in black children that are rated by experts as high priority areas where the media could make an important contribution, are the following:

- causal factors and prevention
- incidence
- manifestation and early identification
- rehabilitation

(1) Elucidation

Most important are prevention and early identification, necessitating a knowledge of causal factors. Information on causal factors and guidance with regard to preventive measures should be expertly presented to be anywhere near effective. It should be reinforced by follow-ups and ongoing support, especially directed at parents and pregnant women.

(2) Recommendation

Items presented by the media (collectively and individually) concerning the facets of impairment mentioned above should be regarded as highest priority, in conjunction with the first recommendation about the projection of image to the public. This applies even more specifically to presentations on educational television, a medium which has a strong impact on the general public.

(3) Implication

Each medium should determine its position in respect of the other media, and optimally utilize its own potential to the benefit of the impaired child. This in turn implies that all the respective educational and auxiliary practices should systematically receive attention according to a general plan, avoiding unnecessary duplication. The impaired child and more particularly the older child and adolescent, should also feature in the process.

9.5.4 Finding 4

Diverse problems that the experts on impaired children experience concerning the way in which the media present the cause of the impaired child and project his image to the public:

The nature of the impaired child appears distorted and he is occasionally represented out of sociocultural ethnic context. The manifestations of a particular impairment are also misrepresented from time to time.

(1) Elucidation

Sometimes the representations are wholly optimistic, pessimistic or unrealistic, thereby causing parents to confuse expert opinions and media representations. Radio, television and magazine dramas are named specifically in this context. Sensational effects sometimes predominate, especially in press reports, and the content is based

on erroneous, outdated or unreliable information or terminology of a confusing or stigmatizing nature.

(2) Recommendation

It should be pointed out to the media that they should take special care with the accurate representation of a particular impairment, all the time bearing in mind the ethnic sociocultural context surrounding the manifestation. In close relation to this, the media should also be particularly wary of generalizations devoid of context, which could cause confusion among parents and other interested parties.

(3) Implication

The recommendation implies that the data base of the media (particularly that of the sensationally inclined press) on impairments among children and the manifestations thereof within a particular context, should be updated regularly in collaboration with appointed experts who are widely known for their expertise in the particular field.

9.5.5 Finding 5

What the experts on impaired children conceive the role of the media to be:

Specialized education experts show a remarkable lack of sophistication in their knowledge regarding the place, function, and role of the media as co-workers in the field of impairments among children, particularly with regard to the potential and limitations of the radio, television and press respectively.

(1) Elucidation

Discussions, a limited empirical investigation by means of draft questionnaires, and the subsequent clarification of respondents'

contributions proved the experts to be remarkably vague about the media's role and possible partnership in fighting the cause of the impaired child and representing his image to the general public. Not only were the responses poorly articulated, they were also academically and professionally stereotyped. This creates the impression that there has generally been very little in-depth reflection among the experts themselves on the specific role and value of the media.

(2) Recommendation

Representatives from specialized education should express their needs and expectations in detail by way of in-depth reflection amongst themselves concerning the potential and limitations of the media. Discussions with the media should follow in order to design an operational plan.

(3) Implication

Mechanisms should be devised for continuous contact and consultation between specialized education exponents and the media, thus providing content, structure and optimum facility to the partnership between two most important agents for the welfare of the impaired child and his parents.

9.5.6 Finding 6

With regard to a reliable data base of endorsed information readily available to the media:

According to the preliminary investigation, no central data base exists where reliable, endorsed information on the impaired black child (regarding impairments in professional and layman's terms) could be obtained by the media.

(1) Elucidation

A centralized data bank with the necessary decentralization and segmentation to accommodate the particular requirements of each medium, is absolutely essential. The lack of such a data base generates uncertainty in the media and confusion among parents and other interested parties, apart from the fact that it is not cost-effective in any terms.

(2) Recommendation

A centralized data base should be mutually negotiated and computerized. It should have a multi-purpose design to meet the needs of all interested parties, and more specifically those of the media.

(3) Implication

The recommendation implies that the formal specialized education sector and others in the field (the media in particular) should enter into a formal partnership on behalf of the impaired child, with a view to improved educational efficiency and cost-effectiveness.

9.5.7 Finding 7

With regard to a comprehensive media strategy for the sake of the impaired child:

The preliminary investigation indicated the lack of a comprehensive media strategy concerning the impaired child.

(1) Elucidation

Presentations by the media are often made haphazardly, dictated by the needs of the moment and the sensation of the day instead of being the embodiment of a comprehensive design of professionally endorsed philosophies and contributions optimally utilizing the

potential of the particular medium. In this regard, synchronization of the radio, television and the press is rather the exception than the rule.

(2) Recommendations

Proponents of specialized education should collaborate with the media in formulating a comprehensive media strategy with regard to the impaired child.

Negotiations should be based on the educational principles contained in the National Policy for General Education Affairs Act, the ten aims concerning disabled people formulated by the Department of National Health and Population Development, the International Declaration of the Rights of the Disabled Child, and the personal life context of the impaired child and his parents.

(3) Implication

The recommendation implies that Government sectors concerned with education, particularly the formal specialized education sector, should enter into a closer, regular partnership with the media. The media are major, but as yet underutilized, promotional agents for the cause of both the impaired child and his parents.

CHAPTER 10

CONFERENCE PERSPECTIVES*

10.1 SUMMATIVE REPORT ON CONFERENCE DISCUSSIONS

10.1.1 Philosophy and views on education for the black impaired

Although they acknowledge and appreciate what is being done for the impaired black child with regard to education, members of the black community unequivocally state that they experience the educational provision for impaired black children to be entirely inadequate. A dire need exists for schools for specialized education as well as for specially trained personnel and attendant facilities. The black community is in quest of hope for the future of its impaired children. Parents, discouraged by the lack of adequate educational provision, display a negative attitude concerning the education that is being provided for their children. The problem is not regarded by the black community as only relating to the provision of education - there are also serious sociopolitical and economic facets.

It appears that the following principles are particularly relevant with regard to the impaired black child (National Policy for General Education Affairs Act, No. 76 of 1984):

Equal opportunities for education, including equal standards of education, shall be strived after for every inhabitant of the Republic irrespective of race, colour, creed or sex (Principle i).

* Conferences on education for impaired blacks:
Durban 25-26 March, 1987
Port Elizabeth 27-28 March, 1987
Pretoria 30-31 March, 1987

- The provision of education shall be directed, in an educationally responsible manner, at the needs of the individual and those of society, and the demands of economic development, and shall take into account the manpower needs of the Republic (Principle iv).
- A positive relation shall be promoted between formal, non-formal and informal education in the school, society and the family (Principle v).
- The State shall be responsible for the provision of formal education, but the individual, parents and society should share responsibility and have a say in that regard (Principle vi).
- The private sector and the State shall share responsibility for the provision of non-formal education (Principle vii).
- The provision of education shall be based on continuing research (Principle xi).

The endeavours to optimally utilize the human potential in the RSA, should also take the impaired black child into consideration.

It is emphasized that the principle concerning equal educational opportunities calls for different and special educational opportunities when it is applied to the impaired black child.

Insofar as the approach to education for the impaired black child may need to be renewed, it should be formulated by educationalists in consultation with all interested parties. Educational aims should be universal. In this regard human differences should not be overemphasized; no distinction should be made between white and black, or between the impaired and the unimpaired. An appeal was made for the integration of the impaired and the unimpaired, and also whites and blacks with regard to the provision of education. The point of departure should be the educational needs of the impaired black child and not his ethnicity. Parent involvement, parent counselling and community involvement with regard to raising and educating the impaired black child, are issues requiring due attention.

Other important principles in the philosophy of education for impaired black children include, for one, that the human dignity of the impaired should not be affected by, for example, attaching names or labels to the various impairments or to impaired individuals. In addition, the impaired child should not be isolated during his education - the endeavour should be to achieve maximum integration and social interaction with the community. The problems and impairments of the impaired child should never be the point of focus; his potential and personal strengths should rather be emphasized and developed.

10.1.2 Problems in the education of impaired blacks

Serious problems and deficiencies experienced in the education of impaired blacks, are the following:

- A serious imbalance prevails between the availability of schools, facilities, personnel and resources on the one hand, and the needs of the black community with regard to adequate education for its impaired children on the other. The consequence is long waiting lists of children who have been identified as impaired and are waiting to be admitted into schools for specialized education. This implies a lapse in their education. In fact, many of these children have to wait such a long time that eventually they become too old for admission into specialized schools.
- In many cases the distance between the school for specialized education and the parental home is so great that it is impossible for the parents to visit the child, which causes the parents to become less involved with their children.
- The crisis in which education for impaired blacks finds itself is best illustrated by the question of how approximately 750 000 impaired black children (projected figure for 1990) are going to be accommodated with regard to their education and training. A temporary solution evidently lies in accommodating the majority of impaired children in mainstream education. Another key question is who should provide in this immense need with regard to education for impaired black

children. Obviously, the Government should assume the primary responsibility, also with regard to upgrading existing schools for impaired black children in order to effect actual change, renewal and improvement. An appeal was made in favour of compulsory education for black children. Another appeal concerned the admission of impaired black children into schools for impaired white children where the educational provision for such black children was inadequate or non-existent.

- Unfavourable socio-economic circumstances complicate the efforts of black families and communities to develop the full potential of the impaired child with regard to his education and training. On account of the poverty and environmental deprivation of these families and communities, the resources required for the adequate education of the child are lacking.
- In rural areas considerable problems are being experienced because of inadequate infrastructures, especially with regard to the identification and diagnosis of the impaired child, his academic and vocational training and (on account of the lack of vocational opportunities) his eventual work placement.
- With regard to the identification of impaired black children, class groups in the mainstream school are too large (50 to 60 pupils) for teachers to readily identify pupils with obscure symptoms of impairment. A decreased teacher : pupil ratio for mainstream schools is therefore advocated. Another problem with regard to the identification of impaired children lies in the fact that psychological tests have not been standardized in respect of the black child and therefore do not make adequate allowance for the cultural background of the child.
- Particular problems are experienced in relation to certain categories of impairment. The deaf child's position is unique in that he experiences communication difficulties that deprive him of the preschool learning experiences which he should acquire via verbal communication. The preschool accommodation of the deaf child thus poses a considerable problem, especially concerning his acquisition of communicative skills.

- The physically impaired child also finds himself in a dilemma: Because of physical deficiencies he can with difficulty be accommodated in the mainstream school, but - on account of inadequate provision - his placement in a school for specialized education is equally problematic. Numerous physically impaired children become too old for admission into a school for specialized education while waiting to be admitted.

- The problems in training the impaired black child for his vocational future, are a primary concern. It is generally difficult for the impaired black child to become involved in the community. Schools for specialized education do not prepare the child adequately to enter into a community that sets high standards and demands regarding, for example, vocational and social skills. Schools for the education of the impaired should not be too "special" - optimum "normalization" and socialization of the impaired child should be aimed for.

- The comprehensive auxiliary services on which the black impaired is dependent throughout the different stages in his life, are poorly co-ordinated.

10.1.3 Model of educational provision for impaired black children

An appropriate model of education needs to be developed for the expansion of educational provision to impaired blacks. The model should be developed based on the findings and recommendations of the present investigation. The cultural otherness and special (compensatory) needs of the impaired black child should be taken into consideration when developing the model.

10.1.4 Mainstream education versus schools for specialized education

This issue concerns the following question: Should impaired children in general rather be accommodated in mainstream education, or should preference be given to the placement of these children in separate schools for specialized education?

Numerous advantages and disadvantages as well as likes and dislikes with regard to the placement of impaired children in mainstream education were noted.

- Disadvantages of placing impaired children in mainstream education are the following: Ignorance and prejudice among unimpaired pupils in the mainstream could be harmful to the impaired child with regard to the manner in which he is accepted and dealt with. Discrimination and mockery with regard to an impairment could cause the impaired child to develop low self-esteem. A teacher who has not been appropriately trained might have difficulty in his acceptance and treatment of the impaired child in his class or in the school environment. Placement of impaired children in mainstream education could cause many practical problems with regard to, for example, adequate school buildings, facilities and provisions for the impaired child, since the provision of personnel, buildings, facilities, et cetera has not been adapted to meet the requirements of the impaired. It would not be cost-effective to adapt all mainstream schools to accommodate impaired children.

- Advantages of placing impaired children in mainstream education, are the following: The child could be better prepared to hold his own in an unimpaired environment, for example with regard to coping with and accepting his impairment amidst the unimpaired, meeting the demands of an unimpaired society, acquiring social skills, et cetera. The impaired child would also be provided the opportunity of communication with unimpaired children, and of becoming involved in an unimpaired society; the child could attend school from his parental home; acceptance in the mainstream school could contribute to his development of a positive self-concept; participating in mainstream school activities could help the impaired child to socialize; the unimpaired child could get to know and accept the impaired - i.e. desirable social and communication skills could be developed by both parties; mainstream education could provide the impaired child with an optimum opportunity for self-actualization.

Guidelines, proposals, views and recommendations concerning the question of mainstream versus specialized education, are the following:

- The nature and degree of a pupil's impairment should determine the decision between mainstream and specialized education. This decision should always be made in respect of an individual child and never in terms of a group of children in a particular impairment category.
- The accommodation problem with regard to education for impaired black children could be solved to a large extent by placing the majority of these children in mainstream education wherever possible, but the special educational requirements dictated by certain impairments necessitate placement in schools for specialized education for many of the others. Specialized education should only be provided for those children who, on account of their particular impairment, are dependent on it. Mainstream education is not a feasible option in the case of all impairments. The intellectually impaired child, for example, cannot be accommodated in the mainstream and the deaf child does not wish to be placed there. On the other hand, it was strongly suggested that the physically impaired child who was able to adapt, should be accommodated in the mainstream.
- On account of their large numbers and the existing deficiencies with regard to specialized education, impaired children should be integrated into mainstream education insofar as it is possible. In schools for specialized education, many impaired children could be prepared for such an integration into mainstream education.
- Mention was made of the possibility of intermediate schools for mildly or moderately impaired children who neither fitted in with the impaired, nor with the unimpaired, and of classes for specialized education to accommodate impaired children in mainstream schools.
- If it is at all possible to accommodate a child in mainstream education, he should not remain in specialized education.
- At each school in the country, classes for specialized education should be established to accommodate academic under-achievers, namely those children who fail to cope with the demands set by the school.

- Specialized education is not indicated for the child with emotional problems and/or deviant behaviour. Adaptation classes should be established in the mainstream school for observation and intervention by school psychologists.

- It is evident that the question as to which impaired children should/could be accommodated in mainstream education, still requires extensive research.

10.1.5 Comprehensive units for the education of impaired black children

Comprehensive school units appear feasible for the provision of education and services to impaired black children. In such a comprehensive set-up, each of the various impairment categories could be accommodated in a separate satellite unit with one, central administration unit for the whole school. Main advantages would include sharing specialist personnel, facilities (i.e. playgrounds, buildings, equipment, swimming pools), and services, also sharing the services of a single multiprofessional team with regard to all the various categories of impairment in the comprehensive unit, and the cost-effectiveness of such a set-up. A comprehensive unit could even be integrated into mainstream schools.

10.1.6 The integration of formal, non-formal and informal education

Formal education alone is evidently insufficient to provide for the needs of the impaired child, his parents, and the impaired adult with regard to education, training, and general information. Non-formal and informal education should be provided to supplement and maintain the existing formal educational provision. These three educational modes should be integrated in order to meet the demands and expectations of society, as well as the learning requirements of impaired individuals and other parties involved. A focal question therefore concerns the way in which formal, non-formal and informal education could be integrated in the education and training of impaired blacks. The impaired child's informal education and social interaction at home should, for example, serve as a base and preparation for his formal and non-formal education. Informal education should be planned

purposefully (e.g. by means of the mass media, family-based programmes, and home training programmes) to be supplementary and preparatory to formal and non-formal education. Non-formal education, however, applies more greatly to the impaired adult who is no longer part of the formal educational system, and who wishes to improve his quality of life and vocational training. The illiterate and unschooled impaired black adult is not accepted into schools for specialized education and has a need for non-formal and vocational training, also with regard to further education and training. Non-formal vocational training could also provide in the training needs of the impaired school leaver who has not yet attained vocational readiness.

An example of integrated formal, non-formal and informal education for the impaired child, his parents, and the impaired adult can be found in the operations of a guidance centre (non-formal education) situated in a school for formal education.

The provision of non-formal education and non-formal vocational training for impaired youths and adults, is regarded as one of the most urgent priorities in education for impaired blacks. The vital role of the private sector in the provision of non-formal education and training is strongly emphasized.

10.1.7 Teacher training

The chief problems experienced with regard to the provision of teachers for the education of impaired black children, are the following:

- There is a shortage of teachers and other personnel with specialized training to manage the identification, training, care, treatment, et cetera of impaired black children.
- Mainstream teachers have not been trained to identify impaired pupils, nor to handle and teach them in accordance with their particular problems; there is great ignorance with regard to impaired children

and their problematic situation. On account of his ignorance and wrong attitude, the teacher who has not been trained to work with impaired children could negatively influence them.

Teachers play a key-role with regard to impaired children and should therefore be more adequately prepared for their task by means of crash courses and in-service training. All teachers should receive training in the identification of impairments, for example in techniques of systematic observation, the application of identification scales, et cetera. It is essential that teachers be acquainted with the various impairments in order to be able to identify them. They should also be informed of the various procedures and channels involved when referring the child for intervention and treatment once he has been identified.

Further recommendations include the following:

- Teachers should not be trained in the general principles of remedial education, but rather in the particular needs and problems of pupils with diverse impairments.
- Teachers seeking employment in specialized education first have to gain experience in teaching unimpaired children.
- In-service training of teachers for technical education should be provided at technical colleges.
- With regard to the provision of personnel, white teachers who are unable to obtain posts in white schools should be employed in education for impaired black children.

10.1.8 Identification of the impaired black child

Four reasons are given for the inadequate early identification of the impaired black child:

- On account of the fact that education is not compulsory for black children, many impaired children are not admitted to schools where they could be identified.

- Because of the present teacher : pupil ratio in black education, teachers cannot play an effective role with regard to the identification, evaluation and diagnosis of impaired children in their classes.
- The infrastructures for identification, evaluation and diagnosis of impaired black children are inadequate - compare for example the insufficient number of school psychologists in black education.
- The practices of identification, diagnosis and intervention are foreign to the black population, especially to the rural population.

For these reasons, a dire need exists for a system of identification, evaluation and diagnosis with regard to impaired black children, and the need for research on definite themes is being felt.

The crucially important role and function of the teacher in the identification, assessment and evaluation of impaired pupils and referrals for specialized intervention, are strongly emphasized. All teachers should be trained to perform this role and function.

Other possible solutions to the problem of identification could be to train teachers especially for this task, or to have mobile multi-professional units visit schools and communities to identify, assess and diagnose impaired children.

In the interest of timeous referral and intervention, the early identification of the impaired child is essential. For this purpose, it is essential that a comprehensive strategy for the early identification, diagnosis and intervention of impaired black children be designed. The Pupil Screening Scale could play an important role in this strategy and should therefore be refined, adjusted, and standardized for utilization by, inter alia, preprimary school teachers. The suggestion was made that parents should be allowed to use this scale, but problems are envisaged in this regard - on the one hand the parents' inability to apply the scale, and on the other their unaccepting attitude concerning the impairment. However, parents should be involved and made part of the identification process.

Further research is required on the Pupil Screening Scale before it can be implemented effectively. Primary and preprimary school teachers could follow brief courses on the implementation of the scale.

Assessment, however, should not be focused only on the nature and degree of the child's impairment, but also on how he in fact functions in respect of particular abilities and skills. In addition, harmful labelling of the impaired child should be avoided during identification and diagnosis. Despite the fact that adequate identification and labelling are prerequisites for proper provision for the impaired child, approaching and managing the identification and labelling of the impaired child incorrectly could result in the child's developing a negative self-esteem and could give rise to all kinds of stigmas.

Special attention should be paid to the gifted impaired child in the practices of identification and instruction. Approximately 3 % of any population group could be regarded as gifted. Among a black population of 20 million, 180 000 pupils could per implication be regarded as highly intelligent. The country should not lose out on the enormous human potential involved.

10.1.9 Professional staff and the multiprofessional team

One of the most serious deficiencies in the provision of education for impaired black children, is the entirely inadequate number of professionals involved. The general opinion is that education, training, intervention, care and treatment of the impaired child cannot be fully accomplished unless the services of a complete multiprofessional team are available to every child, and unless a multiprofessional approach is followed in assisting the impaired child and his parents. The multiprofessional team should comprise medical specialists, a social worker, a school psychologist, a school nurse, an occupational therapist, a physiotherapist, a speech therapist, et cetera.

A complaint was lodged that professional staff were not optimally utilized to the benefit of impaired black children. The ideal would be to have a multiprofessional team available in every school for the impaired.

Apart from their professional assistance in diagnosis, treatment, intervention, et cetera, these experts should also supply information and guidance to parents and organizations involved and bring about a positive change of attitude towards the impaired child. Members of the multiprofessional team should be concerned with focusing on the needs of the impaired child - the child should be approached as someone with problems and needs, rather than as a problem child - and they should also play an important role with regard to the parents' need of support.

The school social worker evidently plays a key role in the multiprofessional team. In addition to being a social worker, he must also be trained with regard to education (not teaching), to enable him to deal with problems related to the impaired child's upbringing and education, besides his social problems. By means of educational training, the school social worker should familiarize himself with the needs and conditions of impaired children. He should function as the multiprofessional team's contact person, provide guidance and counselling in the event of social and educational problems, and co-ordinate the functions of the multiprofessional team's specialist members. As a key person, he could also make a valuable contribution by initiating and co-ordinating parent group projects as well as community projects in aid of impaired black children (community service).

Three proposals regarding the multiprofessional team members are the following:

- Medical specialists should be informed on the implications related to raising and educating children with any of the respective impairments.
- The remedial teacher's function should be redefined - he should no longer be the specialist who merely rectifies mistakes, but rather the one who works on preventing them.
- The training of school psychologists should entail a multicultural approach with a view to effective assistance to all the children in the RSA, thus also the impaired black child.

10.1.10 Preprimary education

The impaired black child's timely admission into a preprimary school is absolutely essential. Placement in the preprimary school offers the optimum opportunity for early intervention with regard to the prevention and treatment of impairments, as well as for the correction of problems and deficiencies that could impede the development of school-readiness.

Involving the child in preschool development stimulation programmes provides the opportunity to identify his impairments on the one hand, and to encourage essential preschool development on the other.

10.1.11 Curricula

With regard to curriculum development for impaired black children, the guidelines and recommendations are as follows:

- There is an urgent need for curriculum research with regard to education for impaired black children. Special attention should be paid to the language problems experienced by these children.
- Curricula should be flexible and relevant in their design to meet the learning requirements and learning problems of impaired children.
- When designing a curriculum, it is important to strive after a balance between the child's general formative education (e.g. education towards independence) and essential vocational training. The design of curricula, however, could be more particularly directed at practical and vocational points of concern, since the school has to prepare the child for non-formal vocational training.
- Curricula for impaired children should neither be overly reduced nor overloaded. The aim should rather be the enrichment of the child, and improving his opportunity to meet societal demands.

- Curricula should be designed so as to prepare the child for mainstream education.

10.1.12 Language problems

It is objected that second language instruction is introduced too soon in the impaired child's school career. A child should have a thorough knowledge of his mother tongue before engaging in a second language and it is proposed that second language instruction should only commence in Standard 3. However, the fact that the impaired black child needs Afrikaans or English to function effectively in the general and vocational community, is also emphasized.

10.1.13 Environmental impairment

The problem of environmental impairment among the majority of impaired black children and their parents warrants an in-depth investigation, on account of the detrimental effect it has on the impaired black child's readiness to learn, as well as on his opportunities in school and in life generally. It is an established fact that unfavourable socio-economic circumstances and cultural dissimilarities contribute to a child's learning problems. This fact should be taken into account when designing a curriculum for the education of impaired black children. By implication, the education and training of these children should not focus too sharply on academic achievement, but should also allow the child to fulfil his potential on a practical and non-formal educational level.

10.1.14 Vocational guidance, training and placement

Vocational guidance, vocational training and vocational placement of impaired black persons deserve special attention in order to

- improve quality of life and level of occupation for impaired blacks;

- bring about vocational and social independence for the impaired;
- meet the employment needs of a particular environment (for example urban, rural or industrial environment), and
- enable the impaired black to take up his position in, and make a constructive contribution to his general and vocational community.

It is premised that the impaired child should choose his own career.

The impaired black's education and training, therefore, should be relevant in the sense that it should optimally prepare him for meaningful pursuance of a future occupation. Such vocational preparation could commence with the training of elementary, basic "manual" skills in the first year at school. The three years' compulsory education envisaged in the new educational dispensation, would provide an ideal opportunity for the vocational preparation of impaired children.

Other proposals and recommendations regarding the vocational orientation, training and placement of impaired blacks are the following:

- The impaired child especially needs vocational guidance and placement services, since he has to compete with prospective employees who are not impaired. The guidance services of the Department of Manpower could be useful with regard to vocational placement. They, however, deal with a mass of job seekers, making it impossible for them to pay adequate attention to each individual applicant. In order to provide in this need for vocational guidance and vocational placement, the Department of Education and Training should establish vocational centres at schools for specialized education, and should collaborate with the private sector not only to determine employment requirements and opportunities, but also to design curricula for the appropriate training.

A significant contribution should be made with regard to the vocational training and work placement of impaired school leavers by means of non-formal education and training. Technikons and similar institutions should be utilized for the impaired black's vocational training. Technical trainers at these institutions should train impaired pupils for technical vocations up to advanced levels.

The practice of work simulation is highly effective with regard to the training, further training, and retraining of the impaired child, youth and adult. Vocational training by means of work simulation practices should be based on job descriptions supplied by the private sector.

In Australia, postschool work preparation programmes have been implemented with great success. During a two year training period, the school leaver is equipped with the following skills:

- physical skills
- social skills
- vocational skills
- intellectual skills
- independence skills

These programmes have also had considerable success with regard to work placement of impaired job seekers.

The responsibility for successful work placement of impaired school leavers should be shared by the school for specialized education, the educational authorities and the private sector. The latter have on many occasions proved its willingness to assist in the vocational training and work placement of impaired black youths.

With regard to job opportunities for the impaired black, the potential of home industries and self-employment should be investigated. The private sector could play a meaningful role in this regard as well. In conclusion, more job opportunities for the impaired should be created in sheltered workshops.

10.1.15 After-care

In many cases the formal, non-formal and informal education and training, the care, and the work placement of an impaired black individual implies an undertaking that reaches from the cradle to the grave. The impaired often requires help, support, and after-care even when he has long since left school and entered employment.

10.1.16 Establishment of a co-ordinating body

Strong pleas went up in favour of the establishment of a single sub-department of specialized education to manage and co-ordinate the provision of education and special services for all impaired persons (white and black) in the RSA. It is necessary to have a central, co-ordinating body in view of the many departments involved with impaired blacks (for example Education and Training, Manpower, National Health and Population Development). Such a body or department should assume responsibility for the co-ordination of all aspects concerning the welfare of impaired blacks (children, youths, and adults): services, personnel, facilities, education and training, institutions, financing, policy, research, curriculum design, dissemination of information, control, publicity, community involvement, prevention of impairment, et cetera. This co-ordination of services, personnel, et cetera should be linked with the multiprofessional team approach.

In addition, the co-ordinating department should effectuate regular liaison with experts (for example educationalists, medical specialists, et cetera), who are involved in training and research and who could provide expertise.

Finally, regular consultations between educational authorities and educationalists are advocated in the interest of adequate and effective education for impaired black children. Academics, therefore, could play an important role with regard to an improved system of education for impaired black children.

10.1.17 Community involvement

Because the provision of financial resources, facilities, services, personnel, resources, et cetera for impaired black children is such an enormous task, society's intense involvement with the education of impaired children is imperative. In this regard, mention is made of community organizations such as churches, women's organizations, universities, the private sector, et cetera. It is a major problem to attain optimum involvement of the black community and the private sector in particular, and to inform organizations re the needs of the impaired.

Financing, the creation of facilities, optimum utilization of existing facilities, et cetera, should be co-ordinated and addressed in an expert and creative way in the short as well as the long term, with regard to all aspects of educational provision for impaired black children.

Great expectations exist with regard to the contribution that should be forthcoming from the private sector, especially regarding financing, non-formal education and training, and work placement. The general feeling is, however, that a black community should initiate its own projects before seeking the assistance of community organizations.

The serious problems still existing in the black community with regard to acceptance of impaired people and the willingness to get involved, imply that the community (general public) should be educated re the acceptance of and assistance to the impaired child. Community projects could be undertaken, for example to encourage public awareness, empathy, and involvement with regard to impaired children. The mass media could be employed to inform the general public regarding impairments and to gain their support for the cause. Mention was made of a project that brought impaired and unimpaired children together on an organized outing, to become better acquainted.

Community centres could play a significant role regarding the provision of diagnostic and other services to the impaired, and also in-service training of specialist personnel involved with the impaired. In respect of the above-mentioned services and training, universities could render assistance on a regular basis, and could even accommodate such community centres, like the one currently functioning at Medunsa. In addition, such a community centre could serve as a base for the provision of community education and training on the needs of the impaired child.

Research is required concerning the ways in which the private sector, in particular, could be involved in the vocational training and work placement of the impaired.

10.1.18 Parent involvement

Indications are that the black parent finds it difficult to accept his impaired child and/or his impairment, and that parents do not readily become involved in raising and educating their impaired child. Therefore, it is of the utmost importance that parent involvement and parent counselling should be an integral part of educational provision for impaired children.

Because parents display a poor sense of responsibility and also ignorance with regard to their child's impairment, parent counselling is required. The parents should be brought to understand the impaired child and to accept his human worth - also not to disown, reject or neglect the child. Parents should be instructed how to raise and manage the child in his otherness, and to ignore the alleged stigma associated with impairment. They have a need for guidance and information on the facilities and services available to the impaired child, and on the organizations that could render assistance. It is evident that the entire black community has to be educated and informed with regard to the impaired child.

Parent involvement implies that parents as well as the community should have a say in all planning with regard to education for the impaired child - "Do with the parents rather than for them".

The ideal would be, via comprehensive parent guidance movements (such as community education projects), to take strong preventive action against the causes of impairments among children.

With regard to the content of parent education, parents wish to know how the child could be expected to develop and function. Many impairments could be prevented by providing information, facilities, services and assistance with regard to the prenatal condition of the mother and child.

A manifest need is that of the mother who has to deal with the task of raising and caring for the impaired child at preschool age. Mothers should be instructed particularly how to stimulate the child's early development in order to contribute to his school-readiness. The Department of Education and Training could provide home training programmes on the various impairments, in which mothers could participate under the guidance of female teachers. An appropriate example of such a home training programme is the HIPPY programme made available to mothers in Israel.

With regard to forms of parent education, it is essential that the required infrastructures be established to accommodate parent education. Proposals relating to this matter are the following:

- A guidance approach to parent education could be followed (community guidance).
- Parent education should be supported by social welfare movements and medical services.
- The multiprofessional team members (social worker, psychologist, medical staff, et cetera) should play a key role with regard to parent counselling and parent education.
- The mass media could be employed for the purpose of parent education, and also to influence the parents to accept their child and his impairment. The Cosby Show is an example of an excellent informal educational television programme. The cartoon type programme is also a feasible proposition.

- Parent involvement is especially attainable by means of group involvement, group action and group projects, for example with regard to the management and support of the school for impaired children. Parent-teacher associations should be formed to encourage parental involvement in the education of the impaired child.

10.1.19 The mass media

The mass media could play an important role concerning

- the education of the parents and the community with regard to acceptance of, and coping with the impaired black child (and adult);
- the provision of non-formal and informal educational and learning opportunities for the impaired child, his parents, the impaired adult and the community;
- the creation of a social awareness with regard to the welfare of the impaired;
- the dissemination of information on the causes, prevention, and incidence of impairments as well as on the education, training and rehabilitation of the impaired, and
- the dissemination of information on the availability of services, resources, home programmes, et cetera for parents and the community.

In order to provide information and education for the impaired child's parents it is feasible, for example, to design and create multimedia strategies comprising components such as educational broadcasts, parent action or study groups, printed material such as manuals and newspapers, et cetera.

An objection was raised with regard to the mass media's failure to always do justice to the cause of the impaired, in often being bent on sensation; in failing to handle labelling of the impaired with caution and sound judgment; in sometimes communicating misrepresenta-

tions and sensational contents with regard to impaired children to the general public; and in ignoring the actual needs of the impaired.

Should the media give a glamorous or sensational account of, for example, the successes with, and achievements of impaired children, unrealistically high expectations could be raised among the parents of impaired children.

10.1.20 Research

A number of aspects regarding the provision of education for impaired black children that require research, have already been mentioned:

- curriculum research
- research with regard to the identification, evaluation and diagnosis of impaired black children as well as the associated adjustments, refining and standardization of the Pupil Screening Scale
- research on the accommodation of impaired children in mainstream education
- research on the private sector's involvement in non-formal vocational training and work placement
- research on the integration of formal, non-formal and informal education within the education and training of impaired black children.

There was a specific proposal for research on the way in which parents reacted to, and experienced the impairment of their impaired child, as well as on the problems actually experienced by the impaired child himself with regard to his being impaired.

It was also expressly required that research findings concerning education for impaired blacks should be feasible.

10.2 RESULTS OF THE QUESTIONNAIRE INVESTIGATION

10.2.1 Introduction

Questionnaires were completed by respondents attending the conferences, before and after each conference. Persons attending two TUATA conferences kindly completed the questionnaire, to represent the views held in mainstream education. The latter respondents comprised school principals of the Soweto Principals' Council as well as teachers and school principals of the TUATA General Executive.

The term pretest indicates questionnaire responses obtained prior to each conference and posttest refers to those obtained on conclusion of a conference. All the responses indicated in the report are those of the pretest, unless posttest is stipulated. Only those posttest responses that differ significantly from pretest responses, thereby indicating that the conferences had notably influenced and altered the respondents' views, are indicated.

The questionnaire is included in this report as Appendix A. The first 39 questions in the questionnaire were used as the pretest, while the entire questionnaire was used as the posttest.

The questionnaire data have been computer processed. Analyses are mainly of a descriptive nature. Tests to determine differences on the 5 % significance level ($\alpha = 0,05$) between pretesting and posttesting ($n = 151$) have also been conducted.

Confidence intervals of 95 % have been computed on the proportions ($\frac{x_i}{n}$) for both pretesting and posttesting. Should two corresponding confidence intervals not overlap, the difference would be significant.

This is, however, a very conservative testing procedure which implies that differences should be reasonably great in order to be significant. Since the variance between the pretesting and posttesting is expected to be large (because, inter alia, the same respondents were used, which may result in a dependency) and unknown, conservatism is an essential consequence.

The 95 % confidence margins for P_i have been computed as follows:

$$P_i \pm 1,965 s_i,$$

with

$$P_i = \frac{x_i}{n}, n = 151$$

and

$$s_i = \sqrt{\frac{P_i q_i}{n}},$$

where

$$q_i = 1 - P_i.$$

The following are the indicated results of the questionnaire investigation:

10.2.2 Respondents

It should be noted that all the respondents did not reply to all the questions in the pretest and posttest. The total number of respondents is as follows:

TABLE 10.1

DISTRIBUTION OF THE TOTAL TEST SAMPLE AS PER AREA

Area	Frequency
Durban	66
Port Elizabeth	35
Pretoria	128
Tuata	94
TOTAL	N = 323

Urban respondents	184
Rural, homeland, black states	123
Origin not indicated	<u>16</u>
	Σ 323

The educational qualifications of respondents range from Standard 2 to doctorates:

TABLE 10.2
EDUCATIONAL QUALIFICATIONS OF RESPONDENTS

Educational qualifications	Frequency	%
Unanswered	6	1,86
Std 2-4	2	0,62
Std 5-8	3	0,93
Std 9-10	18	5,57
Certificate - 2 years or less	26	8,05
Certificate - more than 2 years	38	11,76
Diploma - 2 years or less	19	5,88
Diploma - more than 2 years	50	15,48
Bachelor's degree	113	34,98
Master's degree	33	10,22
Doctorate	15	4,64
	Σ 323	Σ 99,99

Just over one-third of the respondents possess a Bachelor's Degree.

Population groups are represented in the respondent group as follows:

TABLE 10.3
DISTRIBUTION OF THE TEST SAMPLE AS PER POPULATION GROUP

Population group	Frequency	%
Whites	69	21,36
Blacks	209	64,71
Coloureds	5	1,55
Indians	20	6,19
Not indicated	20	6,19
	Σ 323	Σ 100,00

Capacities in which respondents are involved with the impaired, are the following:

TABLE 10.4
RESPONDENTS' INVOLVEMENT WITH THE IMPAIRED

Involvement	Frequency
Teacher/inspector (specialized education)	101
Teacher/inspector (mainstream education)	78
Social worker	46
Occupational therapist	11
Speech therapist	4
Physiotherapist	2
Lecturer: Faculty of Education, teachers' training college	40
Lecturer: Social sciences	17
Administrator: departments of education	24
Administrator: Department of National Health and Population Development	10
Representative: municipality of black township	8
Representative: community organization in black township	14
Representative: national council or organization for the impaired	20
Mildly impaired person	40
Severely impaired person	28
Parent of an impaired child	36
Other	42
Total number of respondents	323

10.2.3 Functions of education

According to the respondents, the functions of education for impaired black children are indicated as follows (each respondent has indicated the two functions he regards as being most important and percentages indicate respondents who have executed one of the two choices in favour of a particular category):

TABLE 10.5

PERCENTAGES INDICATING EDUCATIONAL FUNCTIONS

Function	Percentages		
	Total *	White resps	Black resps
Training in general vocational skills	45,0	40,58	46,88
Development of social skills necessary for functioning in a society	38,0	46,38	32,06
Training for particular vocations	30,0	33,34	28,22
Teaching academic skills (e.g. reading, writing)	28,0	31,88	26,80
Acquainting the impaired with support systems with regard to their needs (e.g. social workers, organizations)	17,0	13,04	18,18
Providing job placement	15,0	18,84	15,32
Providing therapeutic and medical services	15,0	8,70	16,74
Eventually providing an avenue to study for a profession	11,0	5,80	14,36
No response or only one	1,0	1,44	1,44
	Σ 200	Σ 200	Σ 200

* Totals include the choices of all population groups. Although white and black respondents are more or less in agreement concerning the functions of education, white respondents appear more in favour of the development of social and academic skills, whereas black respondents appear more oriented towards training in general vocational skills.

10.2.4 A philosophy of education for impaired black children

Respondents' opinions regarding certain statements are as follows:

TABLE 10.6

A SEPARATE PHILOSOPHY OF EDUCATION SHOULD NOT BE FORMULATED FOR THE IMPAIRED

Response	Total %	White resps %	Black resps %
Yes	58,5	64,7	56,0
Uncertain	12,5	13,2	11,5
No	28,9	22,1	32,5

TABLE 10.5

PERCENTAGES INDICATING EDUCATIONAL FUNCTIONS

Function	Percentages		
	Total *	White resps	Black resps
Training in general vocational skills	45,0	40,58	46,88
Development of social skills necessary for functioning in a society	38,0	46,38	32,06
Training for particular vocations	30,0	33,34	28,22
Teaching academic skills (e.g. reading, writing)	28,0	31,88	26,80
Acquainting the impaired with support systems with regard to their needs (e.g. social workers, organizations)	17,0	13,04	18,18
Providing job placement	15,0	18,84	15,32
Providing therapeutic and medical services	15,0	8,70	16,74
Eventually providing an avenue to study for a profession	11,0	5,80	14,36
No response or only one	1,0	1,44	1,44
	Σ 200	Σ 200	Σ 200

* Totals include the choices of all population groups. Although white and black respondents are more or less in agreement concerning the functions of education, white respondents appear more in favour of the development of social and academic skills, whereas black respondents appear more oriented towards training in general vocational skills.

10.2.4 A philosophy of education for impaired black children

Respondents' opinions regarding certain statements are as follows:

TABLE 10.6

A SEPARATE PHILOSOPHY OF EDUCATION SHOULD NOT BE FORMULATED FOR THE IMPAIRED

Response	Total %	White resps %	Black resps %
Yes	58,5	64,7	56,0
Uncertain	12,5	13,2	11,5
No	28,9	22,1	32,5

The opinions of the 151 respondents subjected to both pretesting and posttesting, were significantly (5 %) more positive on conclusion of the conferences than before the conferences. This implies that on conclusion of the conferences, respondents were even more certain that a separate philosophy should not be formulated for the impaired.

TABLE 10.7

PARENTAL INVOLVEMENT IS ESSENTIAL IN RAISING AND EDUCATING IMPAIRED CHILDREN

Response	Total %	White resps %	Black resps %
Yes	99,1	100,0	99,5
Uncertain	0,6	0,0	0,5
No	0,3	0,0	0,0

TABLE 10.8

COMMUNITY INVOLVEMENT IS ESSENTIAL IN THE UPBRINGING AND EDUCATION OF IMPAIRED CHILDREN

Response	Total %	White resps %	Black resps %
Yes	96,5	98,5	95,6
Uncertain	1,3	1,5	1,0
No	2,2	0,0	3,4

TABLE 10.9

ALL FORMS OF INTERVENTION SHOULD TAKE INTO ACCOUNT THE IMPAIRED CHILD'S TOTAL SITUATION IN LIFE, INCLUDING HIS ASPIRATIONS AND ACTIVITIES

Response	Total %	White resps %	Black resps %
Yes	96,9	98,5	95,6
Uncertain	1,6	0,0	2,4
No	1,6	1,5	1,9

TABLE 10.10

THERE SHOULD BE A CENTRAL AUTHORITY OR DEPARTMENT TO PROVIDE FOR ALL THE EDUCATIONAL NEEDS OF ALL IMPAIRED PERSONS IN THE RSA

Response	Total %	White resp %	Black resp %
Yes	88,4	79,7	90,7
Uncertain	5,7	11,6	3,9
No	6,0	8,7	5,4

TABLE 10.11

A CENTRAL DATA BASE FOR STORING INFORMATION ON ALL IMPAIRED PERSONS IN THE RSA SHOULD BE ESTABLISHED FOR USE BY RESEARCHERS, ADMINISTRATORS, ET CETERA

Response	Total %	White resp %	Black resp %
Yes	89,9	87,0	90,7
Uncertain	6,9	8,7	5,9
No	3,1	4,3	3,4

10.2.5 Incidence figures

Respondents' opinions regarding the incidence of impairment in the RSA are as follows:

TABLE 10.12

THE INCIDENCE OF IMPAIRMENTS AMONG BLACK CHILDREN IN THE RSA IS HIGHER THAN/LOWER/THE SAME AS FOR DEVELOPED COUNTRIES OF THE WORLD

Response	Total %	White resp %	Black resp %
Higher	39,3	57,4	35,9
Lower	4,4	2,9	5,8
Same	19,8	16,2	20,4
Uncertain	36,5	23,5	37,9

10.2.6 Teacher training

The following practices most urgently require attention in the in-service training programmes for mainstream education (respondents have indicated two topics which they regard as being most important and percentages indicate respondents who have executed one of the two choices in favour of a particular practice):

TABLE 10.13

IN-SERVICE TRAINING CURRICULUM FOR MAINSTREAM EDUCATION

Practices	Percentages		
	Total	White resps	Black resps
Early identification of impairments at a preschool age	56,00	68,12	52,64
Specialized teaching techniques for the various categories of impairment	45,00	50,72	38,76
Remedial teaching	29,00	29,00	30,14
Identification of impairments at school age	21,00	31,88	17,70
Specialized diagnosis of impairments	19,00	7,26	23,92
No response or only one	32,00	13,04	36,84
	Σ 200	Σ 200	Σ 200

The following practices most urgently require attention in student teacher training programmes for mainstream education (respondents have indicated two topics which they regard as being most important and percentages indicate respondents who have executed one of the two choices in favour of a particular practice):

TABLE 10.14

CURRICULUM FOR TEACHER TRAINING (MAINSTREAM EDUCATION)

Practices	Percentages		
	Total	White resps	Black resps
Early identification of impairments of a preschool age	50,00	49,28	49,76
Specialized teaching techniques for the various categories of impairment	46,00	56,52	41,14
Identification of impairments at school age	24,00	43,48	21,06
Remedial teaching	23,00	24,64	21,06
Specialized diagnosis of impairments	13,00	11,60	16,26
No response or only one	44,00	14,48	50,72
	Σ 200	Σ 200	Σ 200

10.2.7 Parent counselling

The following practices most urgently require attention in parent counselling programmes (respondents have indicated two practices which they regard as being most important and percentages indicate respondents who have executed one of the two choices in favour of a particular practice):

TABLE 10.15

PARENT COUNSELLING PROGRAMMES: CONTENTS

Practices	Percentages		
	Total	White resps	Black resps
Early identification of impairments	53,00	47,82	52,64
Caring for an impaired child in the family	39,00	55,08	33,98
Education of impaired children	34,00	18,84	40,66
Prevention of impairments in children	30,00	27,54	32,06
Support systems for the family of the impaired child	28,00	36,24	23,92
Work placement for the impaired	12,00	13,04	12,92
No response or only one	4,00	1,44	3,82
	Σ 200	Σ 200	Σ 200

TABLE 10.14

CURRICULUM FOR TEACHER TRAINING (MAINSTREAM EDUCATION)

Practices	Percentages		
	Total	White resps	Black resps
Early identification of impairments of a preschool age	50,00	49,28	49,76
Specialized teaching techniques for the various categories of impairment	46,00	56,52	41,14
Identification of impairments at school age	24,00	43,48	21,06
Remedial teaching	23,00	24,64	21,06
Specialized diagnosis of impairments	13,00	11,60	16,26
No response or only one	44,00	14,48	50,72
	Σ 200	Σ 200	Σ 200

10.2.7 Parent counselling

The following practices most urgently require attention in parent counselling programmes (respondents have indicated two practices which they regard as being most important and percentages indicate respondents who have executed one of the two choices in favour of a particular practice):

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PARENT COUNSELLING PROGRAMMES: CONTENTS

Practices	Percentages		
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Education of impaired children	34,00	18,84	40,66
Prevention of impairments in children	30,00	27,54	32,06
Support systems for the family of the impaired child	28,00	36,24	23,92
Work placement for the impaired	12,00	13,04	12,92
No response or only one	4,00	1,44	3,82
	Σ 200	Σ 200	Σ 200

The opinion of the 151 respondents who completed both the preand posttests, as to the importance of dealing with prevention of impairments among children in parent counselling programmes, was significantly reinforced (5 %) during the conferences.

It would appear that the respondents are of the opinion that parents should play an important role especially with regard to prevention.

The following institutions should be responsible for presenting counselling programmes for parents of impaired children (respondents have indicated two institutions that they regard as being most suitable, and percentages indicate respondents who have executed one of the two choices in favour of a particular institution):

TABLE 10.16

PARENT COUNSELLING PROGRAMMES: PRESENTERS

Institution	Percentages		
	Total	White resps	Black resps
Department of National Health and Population Development	48,00	40,58	52,64
Social workers	48,00	42,02	50,24
Local health services (clinics, hospitals)	45,00	46,38	44,02
Department of Education and Training	30,00	36,24	25,36
Local school personnel	21,00	26,08	18,18
Other institutions	2,00	2,90	1,44
No response or only one	8,00	5,80	8,12
	Σ 200	Σ 200	Σ 200

10.2.8 Educational provision

The most pressing needs regarding impaired children in rural areas, are the following (respondents have indicated two needs that they regard as being most pressing, and percentages indicate respondents who have executed one of the two choices in favour of a particular need):

TABLE 10.17
NEEDS IN RURAL AREAS

Needs	Percentages		
	Total	White resps	Black resps
More schools for impaired children	40,00	36,24	40,66
Counselling services regarding early identification of impairments (preschool age)	34,00	34,78	34,44
Counselling services regarding the preven- tion of impairments	32,00	26,08	33,98
In-service training for teachers con- cerning the education of impaired children	23,00	20,28	23,44
More adequate services of a specialized nature to diagnose impairments precisely	15,00	15,94	15,78
Job training facilities for impaired persons	14,00	21,74	11,48
Job opportunities for impaired persons	13,00	21,74	11,00
Detailed procedures for the identification of impairments in schools	10,00	10,14	9,56
No response or only one	19,00	13,06	19,66
	Σ 200	Σ 200	Σ 200

The most pressing needs regarding impaired children in urban areas, are the following (respondents have indicated two needs that they regard as being most pressing, and percentages indicate respondents who have executed one of the two choices in favour of a particular need):

TABLE 10.18
NEEDS IN URBAN AREAS

Needs	Percentages		
	Total	White resps	Black resps
More schools for impaired children	30,00	36,24	28,22
In-service training for teachers concerning the education of impaired children	30,00	36,24	26,80
Counselling services regarding early identification of impairments (preschool age)	28,00	27,54	29,18
Counselling services regarding the prevention of impairments	25,00	15,94	29,18
Job training facilities for impaired persons	18,00	33,34	11,96
More adequate services of a specialized nature to diagnose impairments precisely	15,00	8,70	16,26
Job opportunities for impaired persons	14,00	21,74	10,52
Detailed procedures for the identification of impairments in schools	12,00	7,24	14,36
No response or only one	28,00	13,02	33,52
	Σ 200	Σ 200	Σ 200

Respondents' opinions regarding certain statements are as follows:

TABLE 10.19
THE EDUCATION AUTHORITIES SHOULD ESTABLISH PRIORITIES IN AN ENDEAVOUR TO MEET THE CRUCIAL EDUCATIONAL NEEDS OF IMPAIRED BLACK CHILDREN

Response	Total %	White resps %	Black resps %
Yes	89,5	87,3	90,1
Uncertain	7,2	6,3	7,9
No	3,3	6,3	2,0

TABLE 10.20

THE SERVICES OF A REMEDIAL TEACHER SHOULD BE AVAILABLE FOR CONSULTATION IN ALL MAINSTREAM SCHOOLS

Response	Total %	White resps %	Black resps %
Yes	92,7	93,9	91,3
Uncertain	3,5	3,0	4,3
No	3,8	3,0	4,3

Respondents have indicated the two categories of impaired black children who most urgently require specialized educational services. (Percentages indicate respondents who have executed one of the two choices in favour of a particular category of impairment):

TABLE 10.21

NEED FOR SPECIALIZED EDUCATIONAL SERVICES

Category of impairment	Percentages		
	Total	White resps	Black resps
Intellectual impairment	40,00	46,38	37,32
Hearing impairment	25,00	18,84	31,10
Physical impairment	21,00	17,40	24,88
Visual impairment	18,00	7,24	24,40
Multiple impairment	16,00	7,24	17,22
Environmental impairment	15,00	27,54	9,10
Learning impairment	14,00	20,28	9,10
Speech impairment	12,00	4,34	16,23
Epilepsy	11,00	8,70	12,92
Cerebral palsy	6,00	8,70	5,26
Childhood psychosis	6,00	2,90	7,18
Chronic and terminal illness	2,00	1,44	1,44
No response or only one	14,00	29,00	3,82
	Σ 200	Σ 200	Σ 200

10.2.9 School placement

Respondents have indicated their opinions regarding those groups of impaired children who should receive their education in the mainstream (together with unimpaired children):

TABLE 10.22

EDUCATION IN THE MAINSTREAM

Groups of impaired pupils	Percentages		
	Total	White resps	Black resps
Mildly impaired children - only <u>certain</u> categories of impairment	44,27	53,62	40,67
<u>No</u> impaired children	19,20	10,14	22,49
Mildly impaired children - <u>all</u> categories of impairment	18,27	23,19	17,70
<u>All</u> mildly impaired children, and severely impaired children from <u>certain</u> categories of impairment	9,91	10,14	9,09
<u>All</u> impaired children, irrespective of the degree of impairment	6,81	0,00	10,05
No opinion indicated	1,54	2,91	0,00
	Σ 100	Σ 100	Σ 100

Categories of mildly impaired children who should attend mainstream schools have been indicated as follows (categories marked with * have been indicated by 50 % and more of the respondents):

TABLE 10.23

EDUCATION IN THE MAINSTREAM: MILDLY IMPAIRED CHILDREN

Category of mildly impaired children	From 44,27 % of the total resps	From 53,62 % of the white resps	From 40,67 % of the black resps
Physical impairment	*	*	*
Environmental impairment		*	
Epilepsy		*	
Hearing impairment		*	
Speech impairment		*	
Visual impairment			
Learning impairment			
Intellectual impairment			
Cerebral palsy			
Chronic and terminal illness			
Childhood psychosis			
Multiple impairment			

After the conference, the 151 respondents were significantly (5 %) more convinced that children with a mild hearing impairment should attend mainstream schools. This indicates that hearing impairment is increasingly being regarded as not serious enough to justify exclusion from mainstream schools.

Categories of severely impaired children who should attend mainstream schools, are indicated as follows (categories marked with *, have been indicated by 50 % or more of the respondents):

TABLE 10.24

EDUCATION IN THE MAINSTREAM: SEVERELY IMPAIRED CHILDREN

Category of severely impaired children	From 9,91 % of the total resps	From 10,14 % of the white resps	From 9,09 % of the black resps
Physical impairment	*	*	*
Speech impairment		*	
Chronic and terminal illness		*	
Intellectual impairment			
Hearing impairment			
Visual impairment			
Environmental impairment			
Epilepsy			
Cerebral palsy			
Learning impairment			
Childhood psychosis			
Multiple impairment			

Table 10.23 and Table 10.24 reveal that in general the white respondents include more categories of mildly and severely impaired children among those who should attend mainstream education.

The most appropriate school placement for mildly impaired and severely impaired children is indicated as follows:

TABLE 10.25
SCHOOL PLACEMENT

School placement	Mildly impaired children %	Severely impaired children %
Placement in a mainstream school in the neighbourhood, where limited remedial and specialized services are available	Total: 47,68 white resps: 59,42 black resps: 44,50	Total: 7,43 white resps: 1,45 black resps: 9,57
Placement in a separate school for only one category of impairment, with complete facilities for remedial and specialized education, although it might be a boarding school	Total: 20,74 white resps: 11,59 black resps: 23,92	Total: 36,53 white resps: 44,93 black resps: 26,32
Placement in a comprehensive school for specialized education, although it might be a boarding school	Total: 24,46 white resps: 17,39 black resps: 26,32	Total: 43,03 white resps: 39,13 black resps: 44,98
No indication of school placement	Total: 7,12 white resps: 11,60 black resps: 5,26	Total: 13,01 white resps: 14,49 black resps: 19,13

Respondents have indicated their opinions regarding the following:

TABLE 10.26
CHILDREN WHO ARE SO SEVERELY IMPAIRED AS TO REQUIRE THE SERVICES OF SPECIALISTS OTHER THAN THOSE FROM THE EDUCATIONAL PROFESSION SHOULD ATTEND SEPARATE SCHOOLS AND NOT MAINSTREAM SCHOOLS

Response	Total %	White resps %	Black resps %
Yes	84,1	79,0	86,1
Uncertain	10,5	16,1	9,4
No	5,2	4,8	4,5

10.2.10 Environmental and cultural considerations

Respondents' opinions regarding certain statements are as follows:

TABLE 10.27

ENVIRONMENTAL DEFICIENCIES RESULTING FROM POVERTY MIGHT BE A SIGNIFICANT FACTOR IN THE ETIOLOGY OF IMPAIRMENTS

Response	Total %	White resps %	Black resps %
Yes	85,1	93,8	83,3
Uncertain	11,6	6,2	12,1
No	3,3	0,0	4,5

TABLE 10.28

EDUCATION FOR THE IMPAIRED CHILD OUGHT TO BE ADAPTED ALSO TO MEET THE NEEDS ARISING FROM DEFICIENCIES IN HIS ENVIRONMENT AND CULTURAL SITUATION

Response	Total %	White resps %	Black resps %
Yes	90,8	95,2	88,9
Uncertain	5,6	4,8	6,9
No	3,6	0,0	5,0

TABLE 10.29

ENVIRONMENTAL IMPAIRMENT IS A CATEGORY OF IMPAIRMENT COMPARABLE WITH THE OTHER IMPAIRMENTS

Response	Total %	White resps %	Black resps %
Yes	53,4	43,1	56,8
Uncertain	19,9	10,8	23,4
No	26,7	46,2	19,8

It is evident that white respondents are markedly less in agreement with this statement than black respondents.

10.2.11 Employment

Respondents have indicated the two most common reasons, in their opinion, why some impaired persons return home after completing their education or training instead of entering permanent employment. (Percentages indicate respondents who have executed one of the two choices in favour of a particular reason):

TABLE 10.30

FAILURE TO ENTER EMPLOYMENT

Reasons indicated	Percentages		
	Total	White resps	Black resps
Lack of job opportunities	63,16	63,76	62,68
Their education has not been adequate to enable them to find jobs	38,40	28,98	44,02
Their vocational training has not been adequate for them to qualify for unskilled and semi-skilled work	30,96	36,24	29,66
They have difficulty functioning in society	17,64	16,80	15,78
They receive a government pension	8,66	15,94	6,70
They find working too demanding to cope with in view of their impairments	8,04	5,80	9,10
Their impairments are too disabling	7,74	5,80	8,62
They are supported by their families	5,26	4,34	6,22
Other	3,72	2,88	4,30
No response or only one	16,42	18,86	12,92
	Σ 200	Σ 200	Σ 200

10.2.12 Non-formal education

Respondents have indicated the preferable form of non-formal education for impaired black pupils upon leaving the formal education programme:

TABLE 10.31

NON-FORMAL EDUCATION: FORM

Form of non-formal education	Percentages		
	Total	White resps	Black resps
Non-formal training in facilities which are an extension of the formal school facilities	66,87	63,77	69,38
Non-formal training in facilities completely removed from schools	19,20	21,74	18,18
No indication	13,93	14,49	12,44
	100	100	100

The 151 respondents' opinion regarding non-formal training in facilities which are an extension of the formal school, although still the preferable form of non-formal education, has become significantly (5 %) less favourable after, than before the conference. It therefore seems as though the idea of a completely removed non-formal education is gaining ground.

TABLE 10.32

NON-FORMAL EDUCATION: VOCATIONAL SKILLS

Non-formal training could be most effective with regard to future work placement if -	Total %
- the impaired person were trained to execute <u>actual vocational tasks</u> with actual objects in actual situations	50,99
- the training were focused on work simulation models (that are representative of <u>all elements</u> of vocations in the work environment instead of complete tasks)	45,70
No response	3,31

In the non-formal training of impaired persons for unskilled and semi-skilled work, the focus should not be on the development of labour skills only, but on all aspects of personal development:

TABLE 10.33

NON-FORMAL EDUCATION: PERSONAL DEVELOPMENT

Response	Total %	White resps %	Black resps %
Yes	91,7	98,3	88,9
Uncertain	7,6	1,7	10,0
No	0,7	0,0	1,1

10.2.13 Research priorities

The following research priorities have been indicated by respondents as being most urgent regarding impaired black children (respondents have indicated two priorities, and percentages indicate respondents who have executed one of the two choices in favour of a particular research priority):

TABLE 10.34
RESEARCH PRIORITIES

Research priorities	Percentages		
	Total	White resps	Black resps
Schoolreadiness programme for impaired children of particular categories of impairment	34,06	18,84	40,18
Provision of job opportunities for impaired persons	33,74	46,38	30,62
Teaching techniques for particular categories of impairment (formal education)	30,34	26,08	30,62
Development of screening procedures: preschool age	24,14	20,28	25,84
Teaching techniques for particular categories of impairment (non-formal education)	21,06	17,40	22,48
Elementary education for impaired children of particular categories of impairment	18,58	20,28	17,70
Development of diagnostic measures: preschool age	12,38	10,14	13,88
Development of screening procedures: school age	7,44	14,50	5,26
Development of diagnostic measure school age	4,64	8,70	3,34
No response or only one	12,08	11,60	9,60
Other	1,54	5,80	0,48
	Σ 200	Σ 200	Σ 200

Questions regarding the following aspects were included in the post-test only:

10.2.14 Education model

Respondents have indicated which educational model they prefer as the point of departure from which to develop educational services for impaired black children:

TABLE 10.35
EDUCATIONAL MODEL

Educational model	Total %
A new model based on insights gleaned from recent research	77,48
The existing model of specialized education	19,87
No response	2,65

10.2.15 Identification and diagnosis

Respondents' opinions regarding certain statements are the following:

TABLE 10.36
THE PUPIL SCREENING SCALE COULD BE EFFECTIVE TO IDENTIFY CHILDREN
REQUIRING SPECIALIZED ASSESSMENT AND INTERVENTION

Response	Total %
Yes	83,1
Uncertain	15,5
No	1,4

TABLE 10.37
THE PUPIL SCREENING SCALE COULD EASILY BE ADMINISTERED AND SCORED BY
TEACHERS

Response	Total %
Yes	66,2
Uncertain	27,6
No	6,2

TABLE 10.38

A DYNAMIC TESTING MODEL (e.g. FEUERSTEIN'S LEARNING POTENTIAL ASSESSMENT DEVICE) IS PREFERABLE TO CONVENTIONAL PSYCHOMETRIC TESTS IN DOING FULL ASSESSMENTS

Response	Total %
Yes	61.1
Uncertain	34.0
No	4.9

SUMMARY: FINDINGS AND RECOMMENDATIONS OF THE RESEARCH PROJECT

The principal finding(s) and attendant recommendations with regard to each of the aspects of the research investigation on Education for impaired black children are the following:

(i) Philosophy of education

- There is no need for a separate philosophy of education for impaired black children. The philosophy with regard to unimpaired children suffices. Insofar as there is a need for renewal with regard to a philosophy of education, it should be determined by educationalists in consultation with all interested parties. All children, including the impaired, are entitled to equal opportunities in education, occupation and life itself. Any discrimination with regard to education for impaired black children is unacceptable. The focus in education for impaired black children should be on the needs, environment, totality, individuality and dignity of the child.
- The principle of equal educational opportunities for the impaired black child does imply educational provision that is different and special.
- In the provision of education for the impaired black child, the point of departure should be the needs of the child.
- An overview of the philosophical principles and educational objectives that are fundamental to mainstream education should be obtained for practical application with regard to the impaired black child.
- Although the parents, community and private sector all have a role to play in the provision of education for impaired black children, it remains the primary responsibility of the State to ensure adequate educational provision.

Aspects that should be emphasized in practice are the following: preventive practices, early identification, intervention and assistance with regard to the impaired child, the integration of formal, non-formal and informal education, training of all involved personnel, educational models, guidance, parent involvement, community involvement, curricula for the impaired, et cetera.

- Continued research is required with regard to education and care for impaired blacks. Action research appears to be especially appropriate.

(ii) Incidence

- The expected total number of impaired black pupils projected for 1990 is as follows:

Self-governing states:	329 824
Independent states:	227 458
Department of Education and Training:	<u>200 431</u>
TOTAL	757 713

- The main influencing factors on the incidence of impairments in Third World countries are as follows:

- poverty
- malnutrition
- undernourishment
- diseases (epidemics)
- ignorance
- population growth
- population movement
- inadequate medical services and facilities
- the use of African medicines
- cultural characteristics
- congenital deficiencies
- poor hygiene
- childhood infections
- traditional birth practices
- deprivation

(iii) Provision of education

- Provision of education for impaired black children in the RSA is

inadequate. This also applies to all associated provisions such as personnel, facilities, et cetera. In the case of certain categories of impairment no provision is made at all.

- The most serious categories of problems experienced with regard to specialized education are the following:
 - problems related to the pupils
 - problems related to the provision of professional auxiliary services
 - problems related to educational and hostel staff
 - problems related to the parents
 - problems related to the provision of accommodation
 - problems related to the availability of funds
 - problems related to the identification of impaired pupils.

- The black community experiences educational provision for its impaired children as being entirely inadequate. The dominant perception concerns the serious discrepancies between existing educational provision and the educational needs of impaired black children.

- The provision of education for impaired black children should be improved, renewed, expanded, and adjusted in its entirety.

- An investigation is required to determine the most effective and meaningful provision of education for each of the various categories of impairment.

- Curriculum development based on a workable curriculum model for the education for impaired blacks should be a priority in devising adequate education and vocational training for these people. Curriculum development should take into account the needs, nature and degree of impairment, language problems, environmental impairment and work placement problems of the impaired black person. It should be directed at effective vocational education, i.e. preparing the impaired black to cope with life and an occupation. Curricula

should be flexible, relevant, practical, and vocationally oriented and should take the impaired black child's learning requirements and problems into account. The striving should be after a balance between general formative education and vocational preparation of the impaired child.

- The solution to the problem of educational provision for impaired black children lies in accommodating the vast majority of them in mainstream education, but in classes of a number that would enable the teacher to deal with the pupils' particular problems individually. Placing impaired children in schools for mainstream education holds certain advantages as well as disadvantages. The decision between mainstream education and specialized education should be made with regard to each pupil individually, and not with regard to a group of pupils in a particular category of impairment. However, many impaired children are indeed dependent on specialized education.

- For the sake of effective education and services with regard to the impaired black child, comprehensive school units are strongly advocated and recommended on account of the many advantages (e.g. cost-effectiveness).

- An appropriate model of education should be created, based on the findings and recommendations of the present research.

- With regard to educational provision in urban and rural areas, the following needs are most evident: more schools for impaired children, extensive information services with regard to early identification and prevention of impairments, and in-service teacher training for specialized education. The most pressing need is evidenced for educational provision with regard to the intellectually impaired child.

- With regard to placement in schools, mildly impaired children in certain categories of impairment can readily be accommodated in mainstream education, namely physical impairment, environmental impairment, epilepsy, hearing impairment and speech impairment.

Severely impaired children are dependent on schools for specialized education.

(iv) Identification, evaluation and diagnosis

- The early initial identification of the impaired black child is not efficiently performed.
- Special attention should be paid to the timeous identification, evaluation and diagnosis of impaired black children, in order to provide them with the education they are entitled to. Models, instruments, procedures, practices and systems should be developed to this purpose, and teachers should be trained to assist in the identification of impaired pupils.
- The identification and assessment of the impaired black child are exceptionally problematic on account of the fact that psychological tests and other screening instruments have not been standardized for the black child.
- In order to ensure timeous identification, referral and intervention, a comprehensive strategy should be devised, in which the Pupil Screening Scale (in its refined and standardized form) could play a significant role.

(v) Vocational guidance, training and placement

- The practices, personnel and infrastructures involved here, are entirely inadequate with regard to impaired black persons in the RSA.
- Problems surrounding vocational guidance, training and placement are of vital import because of, inter alia, a critical lack of job opportunities.
- Vocational training and the attainment of vocational skills by means of non-formal education deserve a high priority in the provision of education for impaired blacks.

- Vocational training should focus on available vocational opportunities and the manpower needs of the country.
- Vocational training centres should be established and systems developed to meet the impaired black person's needs.
- Related concepts warranting special attention are education from childhood to adulthood, vocational objectives in schools, and education via formal and non-formal channels.

(vi) Non-formal education

- Vocational training for impaired black children in the RSA is inadequate. Deficiencies in this regard could be remedied to a considerable extent by means of non-formal and informal education.
- Non-formal vocational training should be institutionalized. To this end, school facilities should be expanded and training programmes based on work simulation models should be implemented at training centres. Non-formal training, assessment and placement procedures should be integrated. The impaired should attain personal and vocational independence via informal training.
- Integration of the formal, non-formal and informal educational modes is strongly advocated and recommended to meet the learning and educational needs of the impaired black child.
- In non-formal education and training for impaired black persons the focus should not be exclusively on the development of vocational skills. All aspects of personal development should be included.

(vii) The role of the mass media

- The mass media fail to do justice to the impaired black child and his cause. Media presentations are not sufficiently grounded in educational insights, nor are they the result of a meaningful com-

prehensive strategy. Media content is often aimed at sensation and contains misrepresentations. This occurs at the expense of the impaired black child and his parents.

- The media play a major role in educating the general public with regard to the impaired black child, his needs, problems, and aspirations. It should be pointed out to the media that they should be particularly mindful with regard to balanced perspectives and accurate representations concerning the impaired black child. A comprehensive media strategy with regard to the impaired black child should be initiated by persons involved in specialized education, in close liaison with media representatives.

- The mass media have an important role to play in
 - the education of parents and the community with regard to accepting and dealing with the impaired child;
 - the provision of non-formal and informal education for the impaired child, his parents, the impaired adult and the community;
 - the dissemination of information on the causes as well as the prevention of impairment; on the education, training and rehabilitation of the impaired; and on the availability of services, resources, et cetera.

- Although this investigation did not address the possible application of the media in the education of impaired children, the feasibility of distance education and the provision of instructional materials (particularly for impaired black persons in rural areas) should be investigated.

(viii) Teacher training

- There is a dire shortage of teachers who specialize in teaching the impaired and also of other professional assistants to deal with identification, assessment, diagnosis, training, care, treatment, vocational training, et cetera, with regard to impaired black children.

- An adequate number of teachers should receive further training to provide education and vocational training for impaired black children. In this regard indisputable priorities are the timeous (preschool) identification of impairments and mastery of specialized educational techniques.

(ix) Community and parent involvement

- The poverty, cultural otherness and environmental deprivation of black families and communities prevent them from providing the impaired child with adequate opportunities for education and training.
- On account of inadequate infrastructures, considerable problems are experienced in rural areas with regard to the identification, diagnosis, instruction, vocational training as well as work placement of impaired black children.
- Community involvement implies that not only the black communities themselves, but also the private sector and community organizations and institutions should become closely involved in the education of the impaired children in their midst. Such involvement could be attained by means of community projects.
- On the mass media rests the important responsibility to educate the parents and the community with regard to the impaired child and to cultivate a sharper social awareness in this regard.
- Parent involvement and parent counselling should integrally be part of educational provision for the impaired black child. Parents especially require guidance concerning the timeous identification of impairments and the care of the impaired child within the family context. The responsibility for the presentation of parent guidance programmes rests with organizations such as the community services of the provincial administration, social welfare organizations and local health authorities.

(x) The multiprofessional team

- The optimum provision of education, intervention, care and treatment with regard to the impaired black child depends on the services of a multiprofessional team being available to each child.

(xi) Research

- Comprehensive research on all the above-mentioned problem aspects of education for impaired blacks is urgently required, to ensure adequate and effective education and training. The most urgent need for research concerns school readiness programmes, the provision of vocational opportunities and the development of techniques.

(xii) Establishment of a co-ordinating body

- A co-ordinating body or central authority should be established to manage and co-ordinate the provision of education and special services for all impaired persons in the RSA.

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10

In which capacities have you ever been involved or are you still involved with impaired people? Please encircle all applicable squares

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Teacher/inspector: a school for impaired children	<input type="checkbox"/>	16
Teacher/inspector: mainstream education	<input type="checkbox"/>	17
Social Worker	<input type="checkbox"/>	18
Occupational therapist	<input type="checkbox"/>	19
Speech therapist	<input type="checkbox"/>	20
Physiotherapist	<input type="checkbox"/>	21
Lecturer: faculty of Education, teachers' training college	<input type="checkbox"/>	22
Lecturer: social sciences	<input type="checkbox"/>	23
Administrator: a department of education	<input type="checkbox"/>	24
Administrator: Department of National Health and Population Development	<input type="checkbox"/>	25
Representative: municipality of black township	<input type="checkbox"/>	26
Representative: community organisation in black township	<input type="checkbox"/>	27
Representative: a national council or an organisation for the disabled	<input type="checkbox"/>	28
A mildly impaired person	<input type="checkbox"/>	29
A severely impaired person	<input type="checkbox"/>	30
Parent with an impaired child	<input type="checkbox"/>	31
Other: (specify) _____	<input type="checkbox"/>	32
_____	<input type="checkbox"/>	

11 Of which categories of impairment have you had any detailed experience? Encircle all categories applicable as follows:

Column 1: If you are an impaired person or the parent of an impaired person

Column 2: If your involvement has been active (i.e. administrative, educational and/or professional)

A response may be made in one, both or none of the columns.

	Column 1	Column 2	
	Impaired	Active	
None	1	1	33 - 34
Intellectual impairment	1	1	35 - 36
Hearing impairment	1	1	37 - 38
Visual impairment	1	1	39 - 40
Physical impairment	1	1	41 - 42
Neurological impairment			
cerebral palsy	1	1	43 - 44
epilepsy	1	1	45 - 46
learning impairment	1	1	47 - 48
Childhood psychosis	1	1	49 - 50
Speech impairment	1	1	51 - 52
Environmental impairment	1	1	53 - 54
Chronic and terminal illness	1	1	55 - 56
Multiple impairment	1	1	57 - 58

12 What would you regard as the most important functions of education for impaired black children? Encircle the two which are to you the most important.

- | | | |
|---|----------------------------|----|
| Teaching academic skills, e.g. to read and write | <input type="checkbox"/> 1 | 59 |
| Providing training in general vocational skills, which could be of use in various future jobs | <input type="checkbox"/> 1 | 60 |
| Providing training for specific vocations, with a view to specific future work placement | <input type="checkbox"/> 1 | 61 |
| Eventually providing job placement | <input type="checkbox"/> 1 | 62 |
| Eventually providing an avenue to study for a profession | <input type="checkbox"/> 1 | 63 |
| Developing the social skills necessary for functioning in a society | <input type="checkbox"/> 1 | 64 |
| Acquainting the impaired with support systems, e.g. social workers or organizations who cater for their needs | <input type="checkbox"/> 1 | 65 |
| Providing the necessary therapeutic services, e.g. physiotherapy or medical care | <input type="checkbox"/> 1 | 66 |

Indicate your opinion on the following issues by each time marking the appropriate block:

A philosophy of education for impaired black children

13 Philosophical principles regarding education are equally true for normal and impaired children. Therefore, a separate philosophy of education should not be formulated for the impaired.

1	2	3
Yes	Unsure	No

67

14 Parental involvement is essential in the upbringing and education of impaired children.

1	2	3
Yes	Unsure	No

68

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only

15 Community involvement is essential in the upbringing and education of impaired children.

1	2	3
Yes	Unsure	No

69

16 All forms of intervention (treatment, aid) should take into account the impaired child's total situation in life, including all his aspirations and activities.

1	2	3
Yes	Unsure	No

70

17 There should be a central authority or department to provide for all the educational needs of all impaired persons in the RSA.

1	2	3
Yes	Unsure	No

71

18 A central base for storing data (information) on all impaired persons in the RSA should be established for use by researchers, administrators, etc.

1	2	3
Yes	Unsure	No

72

Incidence figures

19 Do you think that the incidence of impairments among black children in the RSA is higher than/lower than/ the same as for developed countries of the world?

1	2	3	4
Higher	Lower	Same	Unsure

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Training for teachers and student teachers

20

Which practices most urgently require attention in (a) in service training programmes and (b) student teacher training programmes for mainstream education? Encircle the squares for the two topics in both columns which you regard as the most important.

	(a) In- serv.	(b) Stud. teach.	
Early identification of impairments at a preschool age	<input type="checkbox"/>	<input type="checkbox"/>	8 - 9
Identification of impairments at school age	<input type="checkbox"/>	<input type="checkbox"/>	10 - 11
Specialized diagnosis of impairments	<input type="checkbox"/>	<input type="checkbox"/>	12 - 13
Specialized teaching techniques for the various categories of impairment	<input type="checkbox"/>	<input type="checkbox"/>	14 - 15
Remedial teaching	<input type="checkbox"/>	<input type="checkbox"/>	16 - 17

Parent counselling programmes

21

Which practices most urgently require attention in parent counselling programmes? Encircle the two topics which you regard as the most important.

Prevention of impairments in children	<input type="checkbox"/>	18
Early identification of impairments	<input type="checkbox"/>	19
Caring for an impaired child in the family	<input type="checkbox"/>	20
Education of impaired children	<input type="checkbox"/>	21
Support systems for the family of the impaired child	<input type="checkbox"/>	22
Work placement for the impaired	<input type="checkbox"/>	23
Other: <u>(specify)</u> _____	<input type="checkbox"/>	24

22

Who should be responsible for presenting counselling programmes for parents of impaired children? Encircle the two which you regard as most fitting.

The Department of National Health and Population Development

1

25

The Department of Education and Training

1

26

Local school personnel

1

27

Local health service, e.g. the local clinic/hospital

1

28

Social workers

1

29

Other: (specify) _____

1

30

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Educational provision

23

What would you regard as the most pressing needs regarding impaired children (a) in rural areas and (b) in urban areas? Encircle the two in each column which are to you the greatest needs:

	(a) Rural	(b) Urban.	
Counselling services regarding the prevention of impairments	<input type="checkbox"/>	<input type="checkbox"/>	31 - 32
Counselling services regarding early identification of impairments (at preschool age)	<input type="checkbox"/>	<input type="checkbox"/>	33 - 34
Detailed procedures for the identification of impairments in the schools	<input type="checkbox"/>	<input type="checkbox"/>	35 - 36
More adequate services of a specialized nature to diagnose impairments precisely	<input type="checkbox"/>	<input type="checkbox"/>	37 - 38
More schools for impaired children	<input type="checkbox"/>	<input type="checkbox"/>	39 - 40
In-service training for teachers concerning the education of impaired children	<input type="checkbox"/>	<input type="checkbox"/>	41 - 42
Job training facilities for impaired persons	<input type="checkbox"/>	<input type="checkbox"/>	43 - 44
Job opportunities for impaired persons	<input type="checkbox"/>	<input type="checkbox"/>	45 - 46
Other: <u>(specify)</u> _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	47 - 48

Indicate your opinion on the following issues by each time marking the appropriate block:

24

Would you find it acceptable if the education authorities established priorities in an endeavour to meet the vast requirements of education for the impaired black child?

1	2	3
Yes	Unsure	No

49

25

Would you regard it essential to have the services of a remedial teacher available for consultation in all mainstream schools?

1	2	3
Yes	Unsure	No

50

26 Encircle the two categories of impaired black children for whom specialized educational services are the most urgently required:

Intellectual impairment	<input type="checkbox"/>	51
Hearing impairment	<input type="checkbox"/>	52
Visual impairment	<input type="checkbox"/>	53
Physical impairment	<input type="checkbox"/>	54
Neurological impairment: epilepsy	<input type="checkbox"/>	55
cerebral palsy	<input type="checkbox"/>	56
learning impairment	<input type="checkbox"/>	57
Childhood psychosis	<input type="checkbox"/>	58
Speech impairment	<input type="checkbox"/>	59
Environmental impairment	<input type="checkbox"/>	60
Chronic and terminal illness	<input type="checkbox"/>	61
Multiple impairment	<input type="checkbox"/>	62

26

Encircle the two categories of impaired black children for whom specialized educational services are the most urgently required:

Intellectual impairment	<input type="checkbox"/>	51
Hearing impairment	<input type="checkbox"/>	52
Visual impairment	<input type="checkbox"/>	53
Physical impairment	<input type="checkbox"/>	54
Neurological impairment: epilepsy	<input type="checkbox"/>	55
cerebral palsy	<input type="checkbox"/>	56
learning impairment	<input type="checkbox"/>	57
Childhood psychosis	<input type="checkbox"/>	58
Speech impairment	<input type="checkbox"/>	59
Environmental impairment	<input type="checkbox"/>	60
Chronic and terminal illness	<input type="checkbox"/>	61
Multiple impairment	<input type="checkbox"/>	62

School placement

27 Which of the following groups of impaired children should in your opinion receive their education in the mainstream (together with normal children)? Encircle only one option.

- | | | | |
|--|--------------------------|---|----|
| a) <u>No</u> impaired children | <input type="checkbox"/> | 1 | 63 |
| b) <u>All</u> impaired children, irrespective of the degree of impairment | <input type="checkbox"/> | 1 | 64 |
| c) <u>Mildly</u> impaired children from <u>all</u> the categories of impairment | <input type="checkbox"/> | 1 | 65 |
| d) <u>Mildly</u> impaired children only from <u>certain</u> categories of impairment | <input type="checkbox"/> | 1 | 66 |
| e) <u>All mildly</u> impaired children, and <u>severely</u> impaired children from <u>certain</u> categories of impairment | <input type="checkbox"/> | 1 | 63 |

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28 **Answer the question only if you encircled (d) in question 27: Which categories of mildly impaired children should attend mainstream schools?**

Intellectual impairment	1	8
Hearing impairment	1	9
Visual impairment	1	10
Physical impairment	1	11
Neurological impairment: epilepsy	1	12
cerebral palsy	1	13
learning impairment	1	14
Childhood psychosis	1	15
Speech impairment	1	16
Environmental impairment	1	17
Chronic and terminal illness	1	18
Multiple impairment	1	19

29

Answer the question only if you encircled (e) in question 27: Which categories of severely impaired children should attend mainstream schools?

Intellectual impairment	1	20
Hearing impairment	1	21
Visual impairment	1	22
Physical impairment	1	23
Neurological impairment: epilepsy	1	24
cerebral palsy	1	25
learning impairment	1	26
Childhood psychosis	1	27
Speech impairment	1	28
Environmental impairment	1	29
Chronic and terminal illness	1	30
Multiple impairment	1	31

30 Which one of the following options would you regard as best for black children with (a) mild and (b) severe impairments? Encircle one each in (a) and (b).

(a) mild imp.
(b) severe imp.

To attend a mainstream school in the neighbourhood, where limited remedial and specialized facilities are available

1	1
---	---

32 - 33

To attend a separate school for only one category of impairment, with complete facilities for remedial and specialized education, although it might be a boarding school

1	1
---	---

34 - 35

To attend a comprehensive school for specialized education (i.e. a school accommodating children with, for example, hearing impairments, visual impairments and neurological impairments on the same premises), although it might be a boarding school

1	1
---	---

36 - 37

Indicate your opinion regarding the following statements:

31 Children who are so severely impaired as to require the services of specialists from professions other than the educational (i.e. a multi-professional team) should attend separate schools and not mainstream schools

1	2	3
Yes	Unsure	No

38

Environmental and cultural considerations

32 Environmental shortcomings resulting from poverty might be a significant factor in the etiology of impairments (i.e. it may lead to other categories of impairment)

1	2	3
Yes	Unsure	No

39

33 Education for the impaired child ought to be adapted also to meet the needs arising from shortcomings in his environment and cultural situation

1	2	3
Yes	Unsure	No

40

34 Do you regard environmental impairment as a category of impairment, comparable with the other impairments, as has frequently been listed in this questionnaire?

1	2	3
Yes	Unsure	No

41

Employment

35 Why do some impaired persons return home after completing their education or training, instead of entering permanent employment? Indicate the two reasons which you regard as the most common:

Their education has not been adequate to enable them to find jobs

 1

42

Their vocational training has not been adequate for them to qualify for unskilled and semi-skilled work

 1

43

Lack of job opportunities

 1

44

They have difficulty functioning in society

 1

45

They find working too demanding to cope with, in view of their impairments

 1

46

They receive a government pension

 1

47

Their impairments are too disabling

 1

48

They are supported by their families

 1

49

Other: (specify)

 1

50

Non-formal education

36 Which form of non-formal education would be preferable for impaired black pupils upon leaving the education programme? Encircle one:

To receive their non-formal training in facilities completely removed from schools

 1

51

To receive their non-formal training in facilities which are an extention of the formal school facilities

 1

52

37 In the non-formal training of impaired persons for unskilled and semi-skilled work, the focus should not be on the development of labour skills only, but on all aspects of personal development.

	1	2	3
Yes		Unsure	No

53

Non-formal education

36 Which form of non-formal education would be preferable for impaired black pupils upon leaving the education programme? Encircle one:

To receive their non-formal training in facilities completely removed from schools

1

51

To receive their non-formal training in facilities which are an extention of the formal school facilities

1

52

37 In the non-formal training of impaired persons for unskilled and semi-skilled work, the focus should not be on the development of labour skills only, but on all aspects of personal development.

1	2	3
Yes	Unsure	No

--

53

Non-formal education

36 Which form of non-formal education would be preferable for impaired black pupils upon leaving the education programme? Encircle one:

To receive their non-formal training in facilities completely removed from schools

1

51

To receive their non-formal training in facilities which are an extention of the formal school facilities

1

52

37 In the non-formal training of impaired persons for unskilled and semi-skilled work, the focus should not be on the development of labour skills only, but on all aspects of personal development.

1	2	3
Yes	Unsure	No

--

53

Research priorities

38 **Which questions need to be addressed most urgently in the research regarding impaired black children? Encircle the two most pressing problems:**

Schoolreadiness programmes for impaired children of specific categories of impairments

 1

54

Elementary education for impaired children of specific categories of impairments

 1

55

Development of screening procedures: preschool age

 1

56

Development of screening procedures: school age

 1

57

Development of diagnostic measures: preschool age

 1

58

Development of diagnostic measures: school age

 1

59

Teaching techniques for specific categories of impairment (formal education)

 1

60

Training techniques for specific categories of impairment (non-formal education)

 1

61

Provision of job opportunities for impaired persons

 1

62

Other: (specify) _____

 1

63

39 **Any further issues regarding education for impaired black children**

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Educational model

- 40 Which would you prefer as the point of departure from which to develop educational services for impaired black children? Encircle one:

The existing model of specialized education

1

8

A new model based on insights gleaned from recent research

1

9

Non-formal education

- 41 Encircle the appropriate square:
Non-formal training can be most effective with a view to future job placement if:

The impaired person is trained to carry out real tasks, on real objects and in real situations

1

10

The training focuses on work simulation models, i.e. it presents all elements of jobs found in the work place instead of complete tasks

1

11

Identification and diagnosis

- 42 Do you think that the Pupil Screening Scale could be effective to identify children requiring specialized assessment and intervention?

1	2	3
Yes	Unsure	No

--

12

43 If your answer to question 42 is no, please state
your reason: _____

13

44 Do you think that the Pupil Screening Scale could
easily be administered and scored by teachers?

1	2	3
Yes	Unsure	No

14

45 Write down any additional points which you think
need to be explored in the Pupil Screening Scale.

15

46 Would you regard a dynamic testing model, like the
Learning Potential Assessment Device, to be preferable
to conventional psychometric tests in doing
full assessments?

1	2	3
Yes	Unsure	No

16

47 If your answer to question 46 is no, please state
your reason: _____

--

17

48 Write down any new insights that you have acquired
during the conference.

--	--

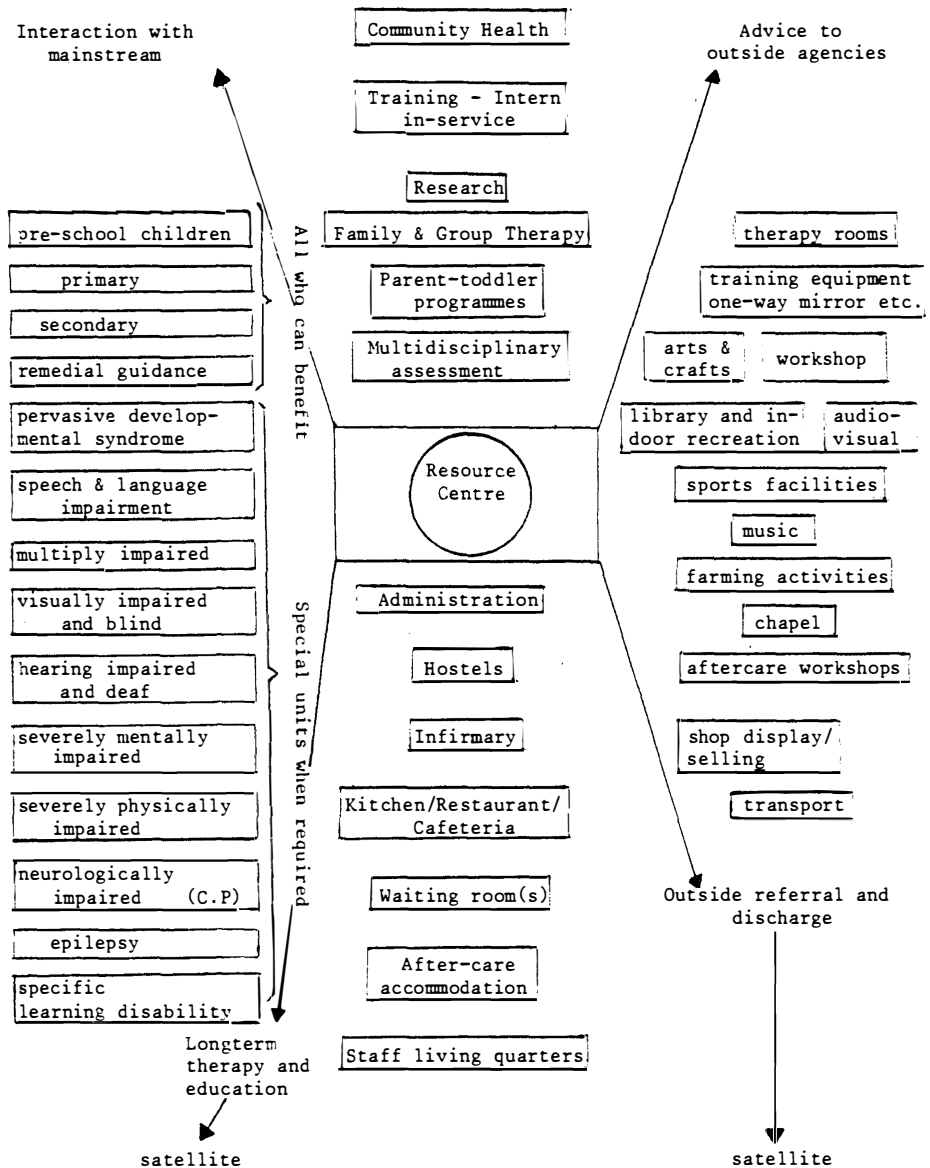
18 - 19

49 Write down any problems that have remained
unanswered.

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20 - 21

A POSSIBLE MODEL: AN INTEGRATED INSTITUTE
FOR SPECIAL EDUCATIONAL OPPORTUNITIES



APPENDIX C

CURRICULUM FOR THE HEARING IMPAIRED*

Field of study	Subjects	Entrance qualification	Occupations	
Commerce	English	School-leaving certificate	Banker	
	Mother tongue		Bookkeeper	
	Mathematics		Stockman	
	Accounting		Clerk	
	Two of the following:		Administrative assistant	
	Business Economics		Computer assistant/help/operator	
	Computer Literacy			
	Typing		Secretary	
			Typist	
			Data typist	
	English	Std 7/Std 8	Cashier	
	Mother tongue		Salesperson	
	Mathematics		Clerk	
	Accounting		Data typist	
	Business Economics/Typing		Copy typist	
	Computer Literacy		Mail distribution clerk	
			Hairdresser (trade)	
	English	Level 5 (intellectually impaired)	Gen.office assistant	
	Mother tongue		Gen.shop assistant	
	Mathematics		Gen.factory worker	
	Business Methods		Gen.commercial help	

* The deaf and the hard of hearing (excluding those who are able to attend mainstream education)

Field of study	Subjects	Entrance qualification	Occupations
Commerce (continued)	Shop and Office Practice Manual Skills/ Basic Techniques (General or specific, e.g. Hairdressing, Leather-work, etc.)		Packer Florist Hairdressing assistant Carrier Shoemaker Shoe repairman Leather industry (fabrication of belts, purses, handbags, etc.)
Domestic Sciences	English Mother tongue Mathematics Accounting Cookery and Dietetics Needlework and Clothing/Business Economics (men)	School-leaving certificate	Caterer Hotel industry Restaurant industry Clothes and textile industry
	English Mother tongue Mathematics Accounting/ Institutional Management Needlework Cookery and Home Management	Std 7/Std 8	Chef Domestic staff in hotels hospitals boarding houses hostels schools institutions Domestic help (private dwellings)

Field of study	Subjects	Entrance qualification	Occupations
Domestic Sciences (continued)	English Mother tongue Mathematics Shop Practice Basic Techniques Business Methods Needlework Weaving Matting Knitting and Crocheting Dressmaking	Level 5 In modules	Baker and confectioner Butcher Florist Fabric lay-out Sewing machine operator Weaver Packer Tagger Curtain hanger Clothes repairer Gen.help in clothing and textile industry
Agriculture and Horticulture	English Mother tongue Mathematics Basic Techniques Agriculture Horticulture	Level 5	Gardener Nursery assistant Farming assistant Farming machine operator Gen.farm worker Agriculture Livestock Labourer Own farming e.g. market gardener Packer Sorter
Technical	English Mother tongue	School-leaving certificate	Depending on trade (See Std 7)

Field of study	Subjects	Entrance qualification	Occupations
Technical (continued)	Mathematics		
	Technical Drawing		Draughtsman Telecom electrician Telecom mechanic
	2 Trades and theory		
	Mathematics Science Technical Drawing	N1, N2, N3	Depending on trade (See Std 7)
Any two <u>related</u> trade subjects e.g. from the building industry, etc. Only a few are indicated	1 Trade and theory		
	English Mother tongue	Std 7 (admission to trade)	Can be trained on the job up to artisan level. Various and diverse options, e.g.
	Mathematics		<u>Motor industry:</u>
	Technical Drawing		Electrician
	Wood and Metalwork		Turner
	Bricklaying and Plastering		Motor mechanic Diesel mechanic
	Panel-beating and Spray-painting		Fitter and turner
	Signwriting		Welder
	Welding		Panel-beater and sprayspainter
	Fitting and Turning		Sheet metalworker Boiler-maker
Motor and Diesel Mechanics		<u>Building industry:</u>	
Joinery		Electrician	
Bookbinding			
Lithographics			

Field of study	Subjects	Entrance qualification	Occupations
Technical (continued)			Wood machineworker
			Stonemason
			Signwriter
			Plumber
			Bricklayer and plasterer-
			Wall and floortiler
			Painter
			Joiner
			Carpenter
			<u>Furniture industry:</u>
			Wood-carver
			Joiner
			Framer
			Cabinet-maker
			Upholsterer
			Cabinet machine operator
			Furniture polisher
			<u>Printers in-</u> <u>dustry:</u>
			Bookbinder
			Lithographer
		Type-setter	
	English	Level 5	Construction worker
	Mother tongue		Operator Assis-
	Mathematics		tant/help in any trade or industry

Field of study	Subjects	Entrance qualification	Occupations
Any 3 <u>related</u> practical subjects	Wood and Metal- work		
Technical (continued)	Motor body repairs Masonry and Bricklaying Upholstering Book Binding Lithography etc.		Specific speciali- zation (low le- vel) e.g. Printers industry Cutter Warehouse marker Box maker Printer's assistant Binder's assistant <u>Furniture industry:</u> Final finishing Polisher Manual sandpape- ring Stainer Veneerer

IMPLICATIONS

- Educational differentiation is required with regard to the following groups:
 - Pupils with minimal hearing impairment who should be accommodated in mainstream education with, where necessary, minor adaptations such as a convenient situation in the classroom.
 - Pupils with mild to moderate hearing impairment (poor hearing) whose hearing can still be used as primary modality through which to communicate with their environment. Considering that they cannot acquire language and speech naturally without the use of acoustic aids and specialized teaching methods, speech therapy and other habilitating measures, they have to be accommodated in schools for the hearing impaired.
 - Pupils with severe to total hearing loss (deaf), whose hearing cannot be used as primary modality through which to communicate with the environment. These pupils require intensive, highly specialized education with every possible acoustic and therapeutic facility. Placement in a school for the hearing impaired is therefore essential.
 - Persons who have become deaf and who, despite good language and speech skills, require specialized education and therapeutic intervention and therefore have to be channelled from the mainstream into specialized education.
 - The hearing impaired with multiple impairments, where the hearing loss is the primary impairment that is complicated further by secondary impairments such as cerebral damage, brain dysfunction, epilepsy, physical impairment, poor vision, intellectual impairment, et cetera. These pupils should also be accommodated in a school for the hearing impaired.
- Vocational training should begin as early as possible in the education for the hearing impaired black person.

- The first full-fledged secondary government school to accommodate only the hearing impaired should be established as soon as possible. The number of hearing impaired pupils currently receiving primary education, as well as the limited number of these pupils who can be accommodated in the Filadelfia Secondary School, justifies the establishment of a special facility in which the recommended broad curriculum of vocational education for impaired black pupils could be followed.

APPENDIX D

CURRICULUM FOR THE VISUALLY IMPAIRED

1. CURRICULUM FOR THE PARTIALLY SIGHTED*

Field of study	Subjects	Entrance qualification	Occupations
Technical	Mother tongue	Matriculation exemption	Building manager
	One official language		Electronic engineer
Mathematics	Mechanical engineer		
Physical Science	Teacher:		
One of the following:	Mathematics		
Woodwork	Physical science		
Metalwork	Woodwork and metalwork		
Electronics	Electronics		
Agricultural Science	Agricultural Science or Home economics		
Home Economics	Architectural draughts man		
One of the following:	Dietician		
Technical	Nurse		
Arithmetic			
Needlework and Clothing			
Mother tongue	School-leaving certificate	Sheetmetalworker	
One official language		Cabinet-maker	
Mathematics		Joiner	
Physical Science		Electro-technician	
		Plumber	

* Distance vision between 6/24 and 6/60 Snellen with correction. Good to fair near vision ability (N-readings between N6 en N12).

Field of study	Subjects	Entrance qualification	Occupations
Technical (continued)	One of the following: Metalwork Woodwork/Home Economics		Motor mechanic Panel-beater Tractor mechanic Mason/Builder TV and radio technician
	Electronics		Agricultural occupations
	Plumbing and Sheet-metalwork		Printer
	Motor Mechanics		Horologist
	Motor Body Repairs		Teacher in one or more of above-mentioned subjects
	Tractor Repairs		
	Masonry and Plastering		Home economics teacher
	Fitting and Turning		Dressmaker
	TV and Radio Repairs		Nurse
	Agricultural Science		Chef
	Lithographic Printing		
	Horology		
	One of the following: Technical Drawing Needlework and Clothing		
	Mother tongue One official language Mathematics Physical Science	Std 8 certificate	Sheetmetalworker Cabinet-maker Joiner Electro-technician
	Metalwork Woodwork		Plumber Motor mechanic

Field of study	Subjects	Entrance qualification	Occupations
Technical (continued)	One of the following: Home Economics Electronics Plumbing and Sheet-metalwork Motor Mechanics Motor Body Repairs Masonry and Plastering Fitting and Turning TV and Radio Repairs Agricultural Science Lithographic Printing Horology One of the following: Technical Drawing Needlework and Clothing Hairdressing Mother tongue One official language Elementary Mathematics Elementary Science Three or more of the following components:	Nine years' compulsory training	Panel-beater Tractor mechanic Mason/Builder TV and radio technician Agricultural occupations Printer Horologist Children's aid: nursery schools Assistant nurse Dressmaker Hairdresser Chef Cabinet-maker Sheet metalworker Plumber Motor mechanic Small engine mechanic Tractor mechanic

Field of study	Subjects	Entrance qualification	Occupations
Technical (continued)	Wood Working		Fitter and turner
	Metal Working		TV and radio repairer
	Plumbing and Sheet-metalwork		Nursery assistant
	Motor Mechanics		Farming assistant
	Small Engine Repairs		Printer's assistant
	Tractor Repairs		Upholsterer
	Masonry and Plastering		Horologist
	Fitting and Turning		Tallow-chandler
	TV and Radio Repairs		Kerosine lamp repairer
	Agriculture:		Brick-maker
	Nursery Management		Assembler/packer
	Crop Farming		Potter
	Livestock Farming		Weaver
	Lithographic Printing		Kitchen help
	Home Economics and Needlework		Nanny
	Upholstery		Dressmaker
	Horology		Assistant nurse
	Tallow Chandlery and Lamp Repairs		
	Brick-making		
	Mounting and Packing		
	Pottery and Claywork		
	Weaving		
	Human Sciences	Mother tongue	Matriculation
	One official language	exemption	Teacher
	Four of the following:		Theologian
			Translator

Field of study	Subjects	Entrance qualification	Occupations
Technical (continued)	History		Social worker
	Physiology		Music teacher
	Business Economics		Interpreter
	Typing		National intelligence officer
	Geography		
	Biblical Science		Museum assistant
	Mercantile Law		Secretary
	Music		Sound controller (SABC)
	Biology		
	Mother tongue	School-leaving certificate	Diploma: Law Teacher
	One official language		Music teacher
	Four of the following:		Museum assistant
	History		Typist
	Physiology		Hairdresser
	Business Economics		Secretary
	Typing		Artistic designer
	Geography		Commercial artist
	Biblical Science		Clerk
	Mercantile Law		Bank clerk
Music		National intelligence officer	
Biology		Sound controller (SABC)	
		Customs official	
Human Sciences	Mother tongue	Std 8 certificate	Typist
	One official language		Assistant secretary
	Four of the following:		Clerical assistant
	History		Hairdresser
	Physiology		Classroom assistant
			Hostel matron

Field of study	Subjects	Entrance qualification	Occupations
	Business Economics		Porter
	Typing		
	Geography		
	Biblical Science		
	Mercantile Law		
	Music		
	Biology		
Commerce	Mother tongue	Matriculation	Accountant
	One official language	exemption	Auditor
	Mathematics		Financial consultant
	Accounting		Commerce teacher
	Economics		Computer sciences
	Computer Science		Economist/teacher
	Mother tongue	School-leaving	Bank clerk
	One official language	certificate	Bookkeeper
	Four of the following:		Computer programmer
	Mathematics		Computer operator
	Accounting		Typist
	Economics		Word processor
	Typing		Cashier
	Business Economics		Saleslady
	Mercantile Law		Secretary
	Shorthand or Snelskrif		Telephone operator
	Computer Science		Data typist
			Clerk (general)
			Receptionist
	Mother tongue	Std 8 certificate	Typist
	One official language		Sales assistant

Field of study	Subjects	Entrance qualification	Occupations
	Four of the following: Typing Accounting Mercantile Law Business Economics Mathematics Shorthand or Snelskrif Economics		Cashier Telephone operator Receptionist Secretary Clerk (general) Assistant bookkeeper
	Mother tongue One official language Four or more of the following: Typing Bookkeeping Mercantile Law Business Procedures Office Administration Snelskrif or Shorthand Mathematics	Nine years' compulsory training	Shop assistant Office assistant Own business Cashier Salesperson
Physical Sciences	Mother tongue One official language Mathematics Physical Science Two of the following:	Matriculation exemption	Architect Programmer Occupational therapist Physiotherapist Nurse Nature conservator

Field of study	Subjects	Entrance qualification	Occupations
	Physiology or Biology Computer Science Agricultural Science Electronics		Animal research: Technician Electro-technical engineer Word processor Teacher Agriculturist
	Mother tongue One official language Mathematics Physical Science Biology or Physiology Computer Science	School-leaving certificate	Programmer Nurse Nature conservator Animal research: Technician Electronics Word processor Teacher Agriculturist
	Mother tongue One official language Mathematics Physical Science Physiology or Biology Computer Science or Agriculture	Std 8 certificate	Farmer Laboratory assistant Data typist Computer operator Nursing assistant

2. CURRICULUM FOR THE BLIND*

Field of study	Subjects	Entrance qualification	Occupations
Human Sciences	Mother tongue	Matriculation	Legal occupations
	One official language	exemption	Teacher
	Four of the following:		Theologian
	History		Translator
	Physiology		Social worker
	Business Economics		Music teacher
	Typing		Interpreter
			National Intelligence officer
	Geography		
	Biblical Science		
	Mercantile Law		
	Music		
	Biology		
	Mother tongue	School-leaving	Teacher
	One official language	certificate	Music teacher
	Four of the following:		Typist
	History		Secretary
	Physiology		Receptionist
	Business Economics		Telephone operator
	Typing		National Intelligence officer
	Geography		
	Biblical Science		
	Mercantile Law		
	Music		
	Biology		

* Distance vision less than 6/60 Snellen.
Near vision not sufficient for use as study medium.

Field of study	Subjects	Entrance qualification	Occupations	
Human Sciences (continued)	Mother tongue	Std 8 certificate	Typist	
	One official language		Assistant secretary	
	Four of the following:		Telephone operator	
	History		National Intelligence officer	
	Physiology			
	Business Economics			
	Typing			
	Geography			
	Biblical Science			
	Mercantile Law			
	Biology			
Physical Sciences	Mother tongue	Matriculation exemption	Programmer	
	One official language		Computer scientist	
	Mathematics		Physiotherapist	
	Physical Science		Teacher	
	Physiology or Biology			
	Computer Science			
	Mother tongue		School-leaving certificate	Programmer
	One official language			Teacher
	Mathematics			
	Physical Science			
Physiology or Biology				
Computer Science				
Commerce	Mother tongue	Matriculation exemption	Programmer	
	One official language		Economic adviser	
	Four of the following:		Teacher	

Field of study	Subjects	Entrance qualification	Occupations
	Mathematics		
	Economics		
	Typing		
	Computer Science		
	Mercantile Law		
	Mother tongue	School-leaving	Typist
	One official language	and Std 8	Dictaphone typist
	Four of the	certificate	Telephone operator
	following:		Secretary
	Mathematics		Receptionist
	Economics or Business		
	Economics		
	Typing		
	Computer Science		
	Mercantile Law		

Technical

Refer classification for the partially sighted. Persons in this category of impairment would probably be excluded from most of the technical professions, which usually require a certain degree of visual ability. On account of the arbitrary nature of the distinction between blindness and partial sightedness, however, each case should be judged on merit.

IMPLICATIONS

- The curriculum for the first six years of compulsory education should include a basic orientation regarding at least three of the following technical and competency fields:

- woodwork
- metalwork
- electrical repairing
- mounting or repairing of motor spares
- welding
- electronic repairs
- repairing of small machines, e.g. lawnmowers
- brick-making
- building
- gardening and nursery management
- crop-farming and stock-farming
- cotton processing
- pottery and clay modelling
- wiring of dashboards
- plumbing
- fitting and turning
- panel-beating and spray-painting
- tallow-chandlery
- repairing of paraffin lamps
- treatment of hides
- dressmaking
- weaving
- knitting
- cookery
- typing
- upholstering

- The curriculum for the six years' compulsory schooling should also include an elementary orientation on the following subjects, as some pupils might possibly have their own businesses one day:

- business methods
- bookkeeping
- business economics
- office administration

APPENDIX E

CURRICULUM FOR THE PHYSICALLY IMPAIRED

(1) Preprimary division

The most fundamental basis for future vocational training is already established in this division:

- activities to promote social development;
- opportunities for creative activities and self-expression;
- activities to enrich or develop receptive and expressive command of language;
- activities and play to stimulate intellectual ability;
- play or activities that focus on movement and will lead to muscle development;
- opportunity for aesthetic development, and
- habit-forming activities such as washing hands, toilet routine, et cetera.

(2) Primary division

<u>Non-examination subjects</u>	<u>Examination subjects</u>
(examination as from Std 2)	

Class Music	First language
Religious Instruction	Second language
Physical Education	Mathematics
Art	History
Hand/Needlework	Geography
Book-education	General Science
Writing Instruction	

(3) Secondary division

Std 5, 6 and 7

Class Music	First language
Religious Instruction	Second language
Physical Education	Geography

Youth Preparedness
Basic Techniques
(Handwork/Art) Std 5

History
General Science
Mathematics

Std 6 (additional)

Technical Orientation
Accounting

Std 7 (additional)

Typing
Accounting

Std 8, 9 and 10

(Higher and standard grade)

Afrikaans
English
Mathematics/Typing
Physical Science/Business
Economics
History/Economics
Biblical Science/Accounting/
Technical Drawing

- A lower grade course is taught from Std 6 to Std 8, with the following curriculum:

Std 6 and 7

English
Afrikaans
Geography
History
Mathematics
General Science

Std 8

Afrikaans
English
Business Economics/
Physical Science
History
Mathematics/Typing

Youth Preparedness
Basic Techniques
(Handwork/Art) Std 5

History
General Science
Mathematics

Std 6 (additional)

Technical Orientation
Accounting

Std 7 (additional)

Typing
Accounting

Std 8, 9 and 10

(Higher and standard grade)

Afrikaans
English
Mathematics/Typing
Physical Science/Business
Economics
History/Economics
Biblical Science/Accounting/
Technical Drawing

- A lower grade course is taught from Std 6 to Std 8, with the following curriculum:

Std 6 and 7

English
Afrikaans
Geography
History
Mathematics
General Science

Std 8

Afrikaans
English
Business Economics/
Physical Science
History
Mathematics/Typing

Domestic Science/Industrial
Arts
Typing/Business Methods

Domestic Science/Metalwork/
Technical Drawing

- (4) A special class course is taught in the senior division, i.e. the division accommodating pupils older than twelve years. It consists of the following curriculum:

Scholastic subjects

First language
Second language
Mathematics
History/Geography

Vocationally-directed subjects

A choice is made from subjects
such as: Copy Typing
Storehouse Practice
Nursing Assistance
Welding
Institution Management

- (5) The educational model proposed in the Department of Education and Training's document "New approach to vocational training", seems appropriate for the education of physically impaired blacks, provided that the necessary differentiation is made in terms of each individual's unique potential and limitations.

(6) Implications

- The inclusion of specialized education for physically impaired blacks when the above-mentioned model of vocational education is phased in, starting with the Filadelfia School.
- Adjustments to physical facilities such as workshops to make provision for the unique needs and potentialities of the physically impaired.

CURRICULUM FOR THE NEURALLY IMPAIRED

1. CURRICULUM FOR EPILEPTICS*

Field of study	Subjects	Entrance qualification	Occupations
Human Sciences	Mother tongue One official language Any four subjects valid for this field of study, e.g. History Geography Business Economics Typing Biblical Science Music	Matriculation exemption	Teacher Legal professions Social worker Civil servant Theologian Radio announcer Television announcer Performing artist
	Mother tongue One official language Four subjects as for Matriculation exemption	School-leaving certificate	Typist Teacher Secretary Commercial artist Customs official Computer operator Diploma: Law Clerks - Administration - Banking - Post Office

* Partial and generalized seizures.

Field of study	Subjects	Entrance qualification	Occupations
Human Sciences (continued)	Mother tongue One official language Four subjects as for Matriculation exemption	Std 8	Clerical assistant Stockman Matron Classroom assistant Security officer Copy typist Data typist
Commerce	Mother tongue One official language Subjects required for Matriculation exemption e.g. Mathematics Accounting Economics Mercantile Law Typing	Matriculation exemption	Any professional occupation Computer industry Field of finance Economist Own business
	Mother tongue One official language Four subjects valid for this field of study, e.g. Mathematics Mercantile Law Snelskrif Computer Science Typing Economics	School-leaving certificate	Clerk -General -Banking -Shop -Post Office Typist Data typist Computer operator Cashier Telephone operator Secretary Word processor Bookkeeper Own business

Field of study	Subjects	Entrance qualification	Occupations
Commerce (continued)	Accounting Commercial Mathematics Mother tongue One official language Any four subjects valid for this field of study e.g. Mathematics Typing Accounting Mercantile Law Business Economics Economics Snelskrif/Shorthand	Std 8	Cashier Sales assistant Typist Clerk Sales representative Assistant bookkeeper Computer operator Stockman Transporter/Deliveryman
	Mother tongue One official language Typing Cash Registers Money Handling Stock Handling Sales Techniques Client Dealings Filing	Nine years' compulsory training	Various commercial occupations entailing routine work, e.g. Cashier Sales assistant Stockman Security officer
Physical Sciences	Mother tongue One official language Four prescribed subjects e.g.	Matriculation exemption	Building industry Engineer Computer industry Paramedic Nurse

Field of study	Subjects	Entrance qualification	Occupations	
Commerce (continued)	Mathematics		Medical doctor	
	Physical Science		Researcher	
	Physiology		Teacher	
	Biology		Agriculturist	
	Computer Science			
	Mother tongue	School-leaving	Computer operator	
	One official language	certificate	Programmer	
	Four prescribed subjects e.g.		Word processor	
	Mathematics		Nurse	
	Computer Science		Technician	
Physiology/ Biology		Research assistant		
Physical Science		Teacher		
		Agriculturist		
	Mother tongue	Std 8	Laboratory assistant	
	One official language		Data typist	
	Four prescribed subjects e.g.		Computer operator	
	Mathematics		Research assistant	
	Physical Science		-Animals	
	Biology/ Physiology		-Plants	
	Computer Science		Nursing assistant	
			Agricultural assistant	
	Technical	Mother tongue	School-leaving	Trade in one of the
		One official language	certificate	industries mentioned
Mathematics			under "subjects"	
Technical Drawing				

Field of study	Subjects	Entrance qualification	Occupations
Technical (continued)	Two related subjects from the : building industry motor industry furniture industry construction industry printing industry electronic industry		
	Mathematics Science Technical Drawing One technical subject: Theory + practice	N1, N2, N3	Trade in one of the industries as mentioned above
	Mother tongue One official language Mathematics Technical Drawing Two related subjects from industries mentioned above	Std. 7	Operator, artisan or technician in one of the industries as mentioned above
Domestic Sciences	Mother tongue One official language	School-leaving certificate	Clothing industry Hotel industry Catering

Field of study	Subjects	Entrance qualification	Occupations
Domestic Sciences	<p>Four subjects valid for this field of study e.g.</p> <p>Mathematics</p> <p>Cookery</p> <p>Dietetics</p> <p>Clothing</p> <p>Institutional Management</p>		<p>Textile industry</p> <p>Maintenance industry</p> <p>Housekeeping</p> <p>Own business (board and lodging)</p>
	<p>Mother tongue</p> <p>One official language</p> <p>Four subjects valid for this field of study e.g.</p> <p>Mathematics</p> <p>Cookery</p> <p>Dietetics</p> <p>Clothing</p> <p>Institutional Management</p>	Std 8	<p>Confectioner</p> <p>Florist</p> <p>Factory worker:</p> <ul style="list-style-type: none"> -Clothes -Textiles -Canning <p>Housekeeper</p> <p>Maintenance worker:</p> <ul style="list-style-type: none"> -Board and lodging -Hotel -Hostel
	<p>Mother tongue</p> <p>One official language</p> <p>At least four of the following:</p> <p>Elementary Mathematics</p> <p>Basic Techniques</p> <p>Business Methods</p>	Level 5 and nine years' compulsory training	<p>Chef</p> <p>Factory worker</p> <p>Own home industry</p> <p>Domestic help</p> <p>Nursing assistant</p> <p>Confectioner</p>

Field of study	Subjects	Entrance qualification	Occupations
Domestic Sciences (continued)	Needlework Hairdressing Weaving Pottery Wickerwork Knitting Cookery		
Agricultural Sciences	Mother tongue One official language Mathematics Basic Techniques Any two of the following: Animal Care Nursery Management Horticulture Poultry-Breeding Animal-Breeding Handling and care of farming equipment	Level 5 or Std 8 or nine years' compulsory training	Farm labourer Nursery assistant Gardener Own farming Tractor driver Truck driver

2. CURRICULUM FOR THE CEREBRAL PALSID*

Field of study	Subjects	Entrance qualification	Occupations
Commerce	Mother tongue	Std 8	Typist
	One official language		Data typist
Four of the following subjects:	Filing clerk		
Typing	General clerk		
Accounting	Stock assistant		
Office Administration	Storeman		
Filing	Security officer		
Storework	Computer operator		
Purchasing	Cashier		
Stock Control	Assistant bookkeeper		
Computer Operations	Receptionist		
Commerce	Mother tongue	Level 5 or nine years' compulsory training	Telephone operator
	One official language		Packer
	Mathematics		Assistant clerk
	Office Routine		Stock assistant
	Client Dealings		Storeman
	Work Procedures		Cashier
Technical	Mother tongue	Std 8 or N1 or Level 5 or nine years' compulsory training	Craftsman or operator
	One official language		in industries mentioned under "Subjects", e.g.
	Mathematics		Lithographic printer
	General Science		Sheet-maker
	Theory and practice		Photocopier

* Spasticity, atetosis, and ataxia

Field of study	Subjects	Entrance qualification	Occupations
Technical (continued)	of any subject in: Steel industry (manufacturing) Printing industry Electronic industry NB. The two languages need not be presented for N1.		

3. CURRICULUM FOR PUPILS WITH SPECIFIC LEARNING IMPAIRMENTS

These pupils could be placed in aid classes in mainstream primary and secondary schools, where they could follow the mainstream curriculum with the necessary differentiation in accordance with individual learning potentialities and needs. Even though no particular curriculum is proposed for these pupils, vocational training is indicated in most cases.

IMPLICATIONS REGARDING THE CURRICULUM FOR THE NEURALLY IMPAIRED

- Curriculum planning for each individual epileptic, based on an in-depth assessment and prognosis of the child in question and with reference to factors such as:
 - the degree of epilepsy
 - the extent to which seizures could be controlled medically
 - the extent of the pupil's neural damage
 - the pupil's total personal profile with particular reference to his self-concept, interests and aptitudes
 - the extent of the pupil's linguistic limitations.
- Individual curriculum planning for each cerebral palsied pupil on completion of an in-depth assessment of his intellect, physical abilities, learning difficulties, et cetera.
- Implementation of the proposed curricula in separate classes at existing schools until such time as schools have been established for each category of neurally impaired pupils.

APPENDIX G

CURRICULUM FOR THE INTELLECTUALLY IMPAIRED*

Field of study	Subject	Entrance qualification		
		Prevocational standard	Year level	Occupations
Domestic Sciences (especially girls)	Mother tongue			
	One official language			
	Mathematics			
	History/			
	Geography			
	General Science			
	One of the following:			
	Needlework			
	and Clothing	6	3	Labourer
		6	3	Labourer in the textile industry
		7	4	Sewing-machine operator
		8	5	Pattern cutter and grader
		8	5	Assistant operator
	Nutrition	6	3	Labourer in the food manufacturing industry
		7	4	Waiter
		8	5	Labourer

* Educable intellectually impaired pupils: intelligence score between approximately 50 and 80.

Field of study	Subject	Entrance qualification		Occupations
		Prevocational standard	Year level	
Domestic		8	5	Operator
Sciences		8	5	Assistant chef
(continued)				
	Home economics			All occupations mentioned in this field of study, plus:
		7	4	Domestic help
	Institutional	7	4	Room servant
	Management	7	4	Linen-room supervisor
		8	5	Nursing assistant
		8	5	Child care
		8	5	Care for the aged
Commerce	Mother tongue			
	One official language			
	Mathematics			
	History/			
	Geography			
	General Science			
	One of the following:			
	Hairdressing	6	3	Manicurist
		6	3	Shampooer
		7	4	Receptionist
		7	4	Salesperson: hair and general cosmetics

Field of study	Subject	Entrance qualification		Occupations
		Prevocational standard	Year level	
Domestic Sciences		8	5	Operator
(continued)		8	5	Assistant chef
	Home economics			All occupations mentioned in this field of study, plus:
		7	4	Domestic help
	Institutional Management	7	4	Room servant
		7	4	Linen-room supervisor
		8	5	Nursing assistant
		8	5	Child care
		8	5	Care for the aged
Commerce	Mother tongue			
	One official language			
	Mathematics			
	History/ Geography			
	General Science			
	One of the following:			
	Hairdressing	6	3	Manicurist
		6	3	Shampooer
		7	4	Receptionist
		7	4	Salesperson: hair and general cosmetics

Field of study	Subject	Entrance qualification			
		Prevocational standard	Year level	Occupations	
Commerce (continued)		8	5	Assistant hair-dresser	
	Typing	6	3	Filing	
		7	4	Sorting	
		7	4	Postman	
		7	4	Post collector	
		7	4	Cashier	
		7	4	Telephone operator	
		7	4	Storeman	
		7	4	Dispatch clerk	
		8	5	Typist	
		8	5	Word processor	
		8	5	Computer operator	
		8	5	Receptionist	
		8	5	Telex operator	
		Shop and Office Practice	7	4	Sales assistant
			7	4	Security officer
		Window Display and Signwriting	7	4	Assistant window-dresser
			7	4	Tag writer
			8	5	Signwriter
	Motor Mechanics (especially boys)	Mother tongue One official language Mathematics History/ Geography General Science			

Field of study	Subject	Entrance qualification		Occupations
		Prevocational standard	Year level	
Motor Mechanics (continued)	One of the following:			
	Panel-beating	8	5	Panel-beater and spray-painter
	Spray-painting	8	5	Vehicle appearance conditioner
	Motor Mechanics	7	4	Garage assistant
		8	5	Motor mechanic
		8	5	Diesel mechanic
		8	5	Workshop technician
Metalwork	Mother tongue			
	One official language			
	Mathematics			
	History/ Geography			
	General Science			
	One or two of the following:			
	Welding and/or Sheetmetalwork	7	4	Farm maintenance: Welder
		8	5	Operator-welder
		8	5	Sheet welder
		8	5	Pipe welder
	8	5	Lawnmower operator-welder	
	8	5	Structured steel-worker	
Plumbing		7	4	Plumber's assistant
		8	5	Plumber

Field of study	Subject	Entrance qualification			
		Prevocational standard	Year level	Occupations	
Metalwork (continued)	Fitting and Turning	8	5	Toolmaker	
		8	5	Fitter and turner	
Cabinet-making	Mother tongue One official language Mathematics History/ Geography General Science One of the following:				
		Woodwork	6	3	Manual sander
			7	4	Furniture polisher
			7	4	Cabinet machiner
			8	5	Cabinet-maker
		Upholstery	8	5	Upholsterer
Building	Mother tongue One official language Mathematics History/ Geography General Science One of the following:				
		Woodwork	6	3	Joiner's assistant
			7	4	Scaffolding
			7	4	Painter's scaffolding

Field of study	Subject	Entrance qualification		
		Prevocational standard	Year level	Occupations
		8	5	Joiner
		8	5	Timbering carpenter
	Masonry	6	3	Plasterer's assistant
		7	4	Basic concrete work
		7	4	Concrete mixing and throwing
		7	4	Vibration and finishing
		8	5	Mason
		8	5	Block paver
		8	5	Plasterer
		8	5	Farm maintenance: builder
	Painting	8	5	Painter

Implications

- The aim of the proposed broad curriculum is neither training for particular vocations, nor preparation for certain trades.
- School-leavers could function as attendants in subjects such as hair-dressing, window display and signwriting, panel-beating, spray-painting, motor repairs, welding, sheetmetalwork, woodwork, upholstery, masonry, plastering and painting, and in time they could take the trade test to obtain journeyman status.
- A bridging module should be instituted after year Level 5, to enable pupils who are capable to serve their apprenticeship.
- Initially, the mother tongue should serve as the medium of instruction, but later an official language should be used.
- Prevocational Standard 1 to 3 could be presented in special classes at primary schools. Presentation of a subject such as Skills and Techniques could serve as technical preparation.
- During prevocational Standards 4 and 5 (year Levels 1 & 2), above-mentioned technical preparation should culminate in the mastery of particular technical skills (e.g. the handling of equipment, welding, filing, et cetera) which are fundamental to more vocationally directed education and training.
- Prevocational Standards 6 and 7 (year Levels 3 & 4), could be regarded as an orientation phase during which pupils are introduced to various fields of study on a rotation basis.
- During prevocational Standard 8 (year Level 5), a pupil should specialize in a particular vocational direction.
- Special classes could initially be instituted at existing secondary schools (that have the necessary facilities) to accommodate pupils who have already completed the special class curriculum in the primary school.

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