

**INCLUSION OF LEARNERS WITH SPECIAL
EDUCATIONAL NEEDS WITH SPECIFIC
REFERENCE TO THE MENTALLY HANDICAPPED
LEARNERS IN THE PRIMARY SCHOOL**

by

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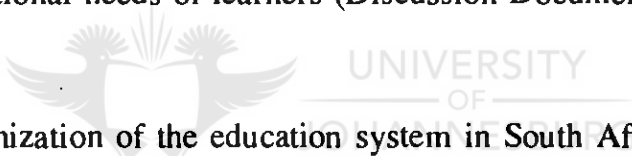


CHAPTER 1

INCLUSION OF LEARNERS WITH SPECIAL EDUCATIONAL NEEDS

1.1 ORIENTATION OF THE RESEARCH

The South African education system is currently undergoing a dynamic reorganization. The new political dispensation has opened the way for inclusive education to be implemented. The Bill of Rights in principle protects the right of all people, including children with special educational needs, against discrimination. The Gauteng Education Bill (September 1995) provides for ordinary schools to try to accommodate the specialized educational needs of learners (Discussion Document, 1996).



This dynamic reorganization of the education system in South Africa has led to the adoption of a philosophy of one education system, with a resultant move towards equity, access, redress and quality education for all learners irrespective of race, religion, gender or special needs. The recognition of such a philosophy requires a revised distribution/redistribution of resources so as to eradicate previous injustices.

In correspondence with the UNESCO Salamanca statement and Framework for Action (1994) which stresses international approval of an inclusionary approach, it is most probable that inclusive education will also be the norm in South Africa. This document reflects the global momentum towards a unitary, inclusionary philosophy regarding all learners, inclusive of Learners with Special Educational Needs (LSEN).

According to Ainscow & Sebba (1996: 9) *inclusion* describes the process by which a school attempts to respond to all pupils as individuals by reconsidering its curricular organisation and provision. Through this process the school builds its capacity to accept all pupils from the local community who wish to attend and, in so doing, reduces the need to exclude pupils.

In the light of the above inclusive education implies that children who were previously taught in special schools are now allowed to go to any (ordinary) school provided that the parents, administrators, teachers and children commit themselves to the right of every child to be an integral part of the school community (Discussion Document, 1996).

1.2 PROBLEM STATEMENT



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Inclusion of a Learner with Special Educational Needs in the mainstream of education has beneficial effects on both the aforementioned learner and the normal achieving student. With inclusion, Learners with Special Educational Needs thrive in a stigma-free environment demonstrating academic and social-emotional growth (Banerji & Dailey, 1995: 511).

Van Dyke, Stallings & Colley (1995: 476) contend that to be truly prepared to take part in the real world as adults, children with disabilities need to be educated in language-rich classrooms and to interact daily with peers who are appropriate role

models.

Against the background of the brief discussion above the problem being researched in this study will be formulated as follows:

- * How can regular teachers be assisted to accommodate Learners with Special Needs with specific reference to the mentally handicapped learner in the mainstream of education?
- * What is the function of educational psychologists in providing guidelines to classroom teachers with regard to inclusive education of mentally handicapped learners?



1.3 AIMS

This study aims to:

- * determine how regular teachers judge the inclusive education system and how willing and prepared they are for the inclusion of mentally handicapped learners in this system;
- * explore and describe how teachers can be assisted by educational psychologists to accommodate the mentally handicapped learner in the mainstream of

education; and

- * find guidelines for an inclusive education system for the use of educational psychologists in the case of mentally handicapped learners.

1.4 CENTRAL STATEMENT

The central statement of this research project is that with inclusive education a learner with special educational needs will, under certain conditions, benefit from the academic program to the best of his/her ability and will be capable of satisfactory social adjustment which will allow him/her to lead a life that will be socially approved and stigma-free. Also, a mentally handicapped child should strive to have a lifestyle as normal as possible and will have rights guaranteed to any other citizen subject to the test of performance.

1.5 PARADIGMATIC PERSPECTIVE

According to Denzin and Lincoln (1994: 107) the paradigmatic perspective of a researcher refers to the world-view that defines the researchers' world, the individual's place in it, and the range of possible relationships to that world and its parts.

Historically, South Africa's disadvantaged children and adolescents have experienced inadequate provision of general education, teacher training and special education

services. This educational disadvantage combined with factors such as malnutrition, unemployment or inadequate salaries of parents, inadequate health care provision, inadequate housing provision and extremely high stress levels in adults and children, have resulted in a nation of children with an unusually elevated level of special educational needs.

With this view in mind the present research project will follow a quantitative methodology. The following is the paradigmatic perspective of the researcher:

1.5.1 Theoretical assumptions

i) Who is the child?

According to Du Toit and Kruger (1991: 4) the child is a human being and as such is a person who is endowed with the same dignity as the adult. A child is always a totality-in-function and as such he/she is totally involved in his/her education and in becoming a responsible adult.

This holistic approach means that the child is physically, psychologically, socially, morally and religiously involved in his/her becoming an adult. Therefore a mentally handicapped child, like any other child with any kind of disability, should be accepted as such and be accompanied as such on his/her way to adulthood. In an education situation this holistic approach is possible with inclusive education.

ii) Who is the teacher?

A teacher is an adult, a grown-up, who knows and understands himself and his world and that of other people, God, norms, ideas and objects (Du Toit & Kruger, 1991:5). The teacher as an educator is responsible to a large extent for the realisation of educational objectives. According to Vrey (1979: 4) the teacher has to account for the quality of the child's becoming an adult. The teacher as a secondary educator has to build a conducive educational environment for the child to thrive safely and to attain satisfactory adulthood. Through inclusive education the teacher should assist the mentally handicapped child to benefit from the education program best suited for his/her level of ability and to be capable of social adjustment.

iii) What is education?



Education refers to the help and support which the child receives from an adult with a view to attaining adulthood (Du Toit & Kruger, 1991: 5). Furthermore, education supposes a deliberate and purposeful action whereby the teacher teaches the child with a view to becoming an autonomous and responsible adult and a valuable participant in his society.

Education is concerned generally with the transmission of beliefs and moral standards, accumulated knowledge and skills. It has been viewed as the nurturing of the human personality and as an investment in human potential. In essence it is a recognition of

the fact that society's way of life must be learned, since an understanding of it is not inherited by birth (Curzon, 1990: 3).

iv) What is educational psychology?

Educational psychology is the study of how learning occurs and of how teaching may help it occur. It includes knowledge about the characteristics or development of learners, about how specific behaviours or ideas are actually learned, about the conditions that promote better learning, about how to accommodate the needs of students with diverse abilities and backgrounds, and about how to cultivate learning (Seifert, 1991: 5).

Traditionally, educational psychology has endeavoured to apply the findings of general, social and child psychology to assist in a better understanding of learning processes. It seeks to discover, by studying the mental, physical, social and emotional behaviour of children and adults, the factors which influence the quality and quantity of learning in educational situations. Ideally it offers to replace the "common sense" or "trial-and-error" variety of hypotheses regarding learning environments with systematic scientific knowledge of individuals in those environments (Child, 1993: 3).

Inclusive education aligns itself with what educational psychology is as it seeks the unconditional acceptance of a Learner with Special Educational Needs and an education system which suits the learner and not vice versa.

v) **The task of an educational psychologist**

The educational psychologist is required to fulfil an advisory, preventative, guiding and therapeutic function in terms of the child with scholastic, emotional and/or behavioral problems (Van Niekerk, 1986: 43). Therefore, the task of the educational psychologist is to act as a consultant and collaborator in terms of giving assistance to the teacher in the inclusive education system, to be able to handle and teach the mentally handicapped learner.

1.6 CONCEPT CLARIFICATION

The following concepts need clarification:



1.6.1 Learners with Special Educational Needs (LSEN)

According to Du Toit (1991: 2) and the Draft Gauteng School Education Bill (1995: 5) LSEN are: "those learners whose education requires more time, planning and effort in order to help them learn. LSEN also include those learners who were in the past identified, labelled and referred to special schools".

1.6.2 Mental handicap

Mental handicap refers to substantial limitations in present functioning characterised

by significantly subaverage intellectual functioning, existing concurrently with related limitations in two or more of the following areas: communication, self-care, home living, social skills, community use, self-direction, health and safety, functional academics, leisure and work. Mental handicap manifests before the age of 18 (Smith, 1994: 179).

1.6.3 Inclusion

Roach (1995: 295) defines inclusion as the practice of serving students with a full range of abilities and disabilities in the general education classroom with appropriate in-class support. According to Brucker (1994: 581) inclusion is the commitment to educate each child to the maximum extent possible in the school and classroom he or she would have otherwise attended. He further states that inclusion brings the support services to the student and requires only that the student benefits from being in the regular classroom, hence it is not required that he or she should keep up with the other students.

1.6.4 Mainstreaming

Mainstreaming is "the selective placement of special education students in one or more regular education" classrooms (Rogers, 1993:1). It presumes that the student must earn the opportunity to remain in the class by being able to keep up the work assigned by the teacher to the other students (Brucker, 1994: 581).

1.7 PLAN OF ACTION

The following topics will be covered in the ensuing chapters:

Chapter 2: Aspects on inclusion according to the literature

Chapter 3: The research design and methodology

Chapter 4: Data analysis and interpretation of the results

Chapter 5: Summary, conclusions and recommendations.

1.8 SUMMARY

This chapter covered the following aspects of the research project:

- * Background of the study;
- * Problem statement;
- * Aims;
- * Central statement;
- * Paradigmatic perspective;
- * Concept clarification; and
- * Plan of action.



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Aspects of the existing literature on inclusion will be discussed in greater detail in the next chapter.

CHAPTER 2

ASPECTS OF INCLUSION ACCORDING TO THE LITERATURE STUDY

2.1 INTRODUCTION

The aim of this chapter is to provide sufficient evidence, through existing literature, that inclusion exists and has been a success in other parts of the world, as well as information about mentally handicapped learners and their inclusion in the mainstream of education as far as it is relevant to this study.



The idea of inclusive education is gaining ground in many parts of the world. It was given further impetus by the UNESCO World Conference on Special Needs Education held in Salamanca, Spain in 1994 (Ainscow, 1997: 3).

In a democratic society such as South Africa policy is, to some extent, a reflection of what the majority of the people want, what values they hold and what compromises they are prepared to make (Discussion Document, 1996: 12). To this effect the Gauteng Department of Education has adopted a policy of Inclusive Education. This is reflective of positions arrived at via the national Educational Policy Investigation (NEPI) process, the ANC's Framework for Education, and the recommendations of the former Department of National Education (DNE) on Specialised Education

(Discussion Document, 1996: 12).

The Gauteng School Education Act, 1995 (Act no. 6 of 1995), creates the legal environment that enables the implementation of Inclusive Education. Chapter 9, section 74, stipulates that:

"Every public school shall, as far as it is reasonably possible, attempt to accommodate the specialised education needs of any learner who attends such a school" (Discussion Document, 1996: 13).

According to the Department of Education publication *Understanding the South African Schools Act* (1997: 2) the governing body of an ordinary public school that provides education to learners with special educational needs must, where practically possible, co-opt a person or persons with expert knowledge on the special educational needs of such learners. This is a positive obligation and a school must take reasonable steps to find such an expert or experts to co-opt.

Mainstreaming, integration and inclusion do not necessarily mean the same thing. However, for the purpose of this study the terms will be used and understood as *inclusion*.

2.2 MODELS OF INCLUSION

Dover (in Tignor, 1995) in her book *Inclusion Facilitator*, listed the following inclusion models:

2.2.1 Full Inclusion

Special needs students are placed in a regular classroom all day; the special education staff members provide consultative support to the teacher.

2.2.2 Collaborative

Special education and general education staff members work together to meet learners' needs. Special education staff members work jointly with the general education staff members because they have more knowledge about learners with special educational needs.

2.2.3 Supported Instruction

Special education staff members provide support services within regular classroom instruction. In this Learners with Special Education Needs remain in their respective regular classrooms and special education staff members visit them there and help them where necessary.

2.2.4 Social Mainstreaming

Special needs learners are included in regular classroom instruction so they can be exposed socially to non-disabled peers. These students are not required to complete all academic assignments in these classes.

2.2.5 Home Class

The special needs learners participate in regular classroom opening and closing activities. For example during singing and prayers in the mornings and afternoons, Learners with Special Educational Needs participate jointly with the normally achieving learners.



2.2.6 Pull-Out (resource)

Special education staff members provide instruction and support to the learners as needed on a one-on-one basis outside the regular classroom.

2.2.7 Non-Academic

The learners participate in regular classroom activities in the areas of art, music and physical education. These learning areas are less threatening and so the Learners with Special Educational Needs can join the normally achieving learners during their presentation.

2.2.8 Mainstreaming

The learners participate in activities in the regular class provided they demonstrate an acceptable level of performance and behaviour. In this model only a learner who can cope with the standard or pace set by a particular class can participate.

2.2.9 Self-Contained

The students stay in a special education classroom or resource room for the entire school day.

2.3 INCLUSION IN PROGRESS



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2.3.1 Inclusive Education in Europe

2.3.1.1 Danish efforts in integration

Danish efforts of integration have roots all the way back to the school-policy debate of the 1940s and the 1950s; a debate about the individual school, about structure, which little by little created a political majority for the opinion that the differentiation of students, after a test in the fifth form, had life-long consequences for the learners. In other words, the differentiation of learners in fact already determined their future social situation, and integration was the main aim of the debate (Tetler, 1995: 9 in

O'Hanlon, 1995).

At the end of the 1980s, Danish research into integration was started. Through research it was discovered that there was no doubt that in Denmark they had the best intentions with regard to integration since the year 1969 (Tetler, 1995: 18 in O'Hanlon, 1995). But even the best intentions were very difficult to carry through because the central administration delayed starting with a programme of implementation in order to carry out the efforts of integration. Instead it has been left to the municipalities and has often been left to the individual teachers to implement and carry out projects to include students in their classrooms and schools.

The position now is as follows: a research project is being re-conducted in an attempt to analyse what room there is for the real, active integration process.

2.3.1.2 A view of integration in Germany

In the Federal Republic of Germany according to Randoll (1995: 39 in O'Hanlon, 1995) the discussion of integration or including children with handicaps into schools began in the early 1970s after the first inclusive day nurseries and kindergartens had been established as a result of parent initiatives and after the children with handicaps educated there reached school-going age.

Due to its federal status the development of inclusive education as well as its

organisation in Germany, is considerably divergent, both in timing and content. To date, inclusive practices predominate in states governed by the Social Democratic Party, with very divergent approaches, selection procedures and practices (Randoll, 1995: 40 in O'Hanlon, 1995).

However, primary school teachers who had not been trained in special education methods during the course of their studies, nor differential or open forms of teaching, commented that they had not been sufficiently prepared for the new tasks, responsibilities and problems. As a result they often felt that the task of teaching the integrated class was too over-taxing (Randoll, 1995: 44 in O'Hanlon, 1995).

2.3.1.3 Inclusive education: The Greek experience

The first recorded cases of inclusive education in Greece date back to 1981, when students with borderline and mild mental retardation were included at the elementary and secondary level for some school subjects (Spetsiotis in Lampropoulou & Padeliadou, 1995: 50 in O'Hanlon, 1995). Apart from the many limitations imposed by the prevailing realities such as insufficient planning at all levels on the part of the government and the lack of participation of the people directly involved in the decision-making and planning processes, inclusive special education was reported to be a reality in Greece by the year 1995 (Lampropoulou & Padeliadou, 1995: 58 in O'Hanlon, 1995).

2.3.1.4 Inclusive education in New Zealand

The Interagency Group Report (1991) stated its belief that the regular classroom teacher can, and should, take responsibility for all students, irrespective of student ability (Ballard, 1996: 35 in Ainscow & Sebba, 1996). This idea is said to be supported in New Zealand by teachers in inclusive schools and by some special school principals and teachers in segregated special education who support inclusion as a goal for all students.

It is clear from these few examples of inclusion in progress that implementing an inclusive education system, no matter how successful it can be, is not an easy task. As Pijl and Meijer (1997: 8) have said, inclusive education depends on the implementation of a set of related factors, with the proviso that several sets consisting of slightly differing factors may do the job. This certainly holds true for different countries, but also within one country there may be different ways of implementing inclusion. Ainscow and Sebba (1996: 7) also say that there is no such thing as an inclusive school, there is only a process of inclusion that has no limits.

Taylor and Sternberg (1989: 1) argue that teaching exceptional learners like a mentally handicapped learner is a challenging, rewarding and sometimes frustrating endeavour.

There are many factors involved in inclusion, e.g. the philosophy behind inclusion, the necessary requirements for inclusion, the effects of inclusion for pupils, parents,

schools and teachers etc. Our interest will be on the effects of inclusion of a mentally handicapped learner in regular education on the teachers.

Attitudes toward inclusive education are clearly multi-dimensional. A strong component of teachers' and education students' attitudes toward inclusive education is the evaluation of a disability with regard to its effect on learning and the type of classroom accommodation required by the student (Wilczenski, 1992: 312).

2.4 A MENTALLY HANDICAPPED LEARNER IN A REGULAR CLASSROOM SITUATION

According to Choate (1997: 2), unlike learners with learning disabilities, learners who are mentally handicapped typically present a relatively even profile of abilities and performances. Most of the academic problems these learners experience reflect their limited language and thinking skills. These students often have difficulty understanding and expressing the meanings of words and ideas. The higher levels of cognitive processing required for critical comprehension, writing and complex problem solving are particularly difficult. These learners tend to overlook subtle meanings and miss opportunities for incidental learning.

The implications are that because of their slow rate of learning, these learners should not be expected to attempt the pace of the general education curriculum. Slow progress permeates their academic performance. Students who are mentally

handicapped need direct instruction to recognize, understand and use terms and develop skills essential to following oral and written directions, to social functioning, and to survival outside the classroom (Choate, 1997: 29).

2.5 WHAT REGULAR TEACHERS HAVE TO FACE IN INCLUSIVE EDUCATION

Teaching students with disabilities such as a mentally handicapped learner in inclusive settings is a multi-faceted task that cannot be accomplished by just one person. Inclusive education happens when a team of mutually supportive players pledges to provide best practices for a student with disabilities. Depending on the disability and level of student's needs, a team with unique but complementary skills will be brought on board to guide, advocate for, and implement this student's educational programs (Alper, Schloss, Etscheidt and Macfarlane, 1995: 18).

More than any other element, it seems that the need for team effort to manage, deliver and support a learner's inclusive education is a drastic change for regular educators who need special attention themselves.

2.6 TEACHERS' ATTITUDES

According to Bennet and Cass (1989: 14) ordinary school teachers' perceptions of special children, including the mentally handicapped learner, were hazy and frequently

wrong. These learners tended to be seen by ordinary school teachers as cases they would not be able to cope with. This is so because of a lack of familiarity with these learners and such a lack of familiarity is causing ordinary school teachers to be anxious and fearful of integration.

2.7 SUCCESSFUL INCLUSION OF LEARNERS WITH SPECIAL EDUCATIONAL NEEDS

For inclusion to succeed several factors were considered in the education system in various countries.

A need for additional training, instructional resources and technical assistance exists.

According to Choate (1997: 15) many teachers in the United States of America have been apprehensive about the integration of students with disabilities into general education; some have vigorously resisted it. This is claimed to have been the base because few teachers have received specialized training at pre-service level; their ability to work with special students has been seriously tested.

Faced with the pressures of mainstreaming and inclusion, general and specific educators, administrators and parents have engaged in a widespread and sometimes continuous debate. Fortunately the exchange of opinion resulted in a better understanding of the concerns of the various participants in the mainstreaming process.

The discussion led to the creation of strong sentiments for the need for additional training, instructional resources and technical assistance to ensure "equality of educational opportunity" for learners with disabilities in general education classes. At both pre-service and in-service level, general and special education teachers must be able to assess and teach academic and social skills to all learners (Choate, 1997: 15).

Taverner, Hardman and Skidmore (1997: 42) also state that the need for training in Special Education Needs (SEN) is necessary both at the initial stages of training and through in-service provision, if school policies on integrating students into the mainstream classroom are to be successful.

According to Hegarty (1995: 60) recent legislation in Italy has mandated the inclusion of special needs issues in initial teacher training. Since the early 1980s, students training for teaching in elementary and lower secondary schools in Norway have spent half a year studying special education. In Ireland, teachers training for primary education receive some instruction on special needs. Pijl and Meijer (1997: 8) state that intensive staff development make teachers more self-confident and willing to accept a special-needs learner.

2.7.1 Collaboration between general and special educators

Stainback and Stainback (in Bradley, King-Sears and Tessier-Switlick, 1997: 11) state that general educators cannot educate students with disabilities alone, but research has

shown that special educators cannot do it alone either.

In an inclusion approach as it is practised in parts of the United States a paradigm shift is occurring (Bradley, King-Sears & Tessier-Switlick, 1997: 11). If a student is not successful in the mainstream of education, the problem is no longer attributed to the learner but to the methods of instruction or materials used. This new paradigm emphasizes that all learners can learn if instruction and materials meet their needs. This shift in thinking requires that general and special educators work together to gain knowledge about how the best teaching and learning can occur. Teacher expertise and materials need to be shared.

Thousand and Villa (1995: 291) a practice in Vermont, believed that general and special educators can and should share the responsibility of meeting the needs of all children that general and special educators are able to work together as co-equal partners, that team-teaching arrangement of general and special educators result in enhanced feelings of competence for all parties and that the act of actually attempting inclusive education leads to positive change in teacher attitudes.

2.7.2 Parental involvement

Understanding and accepting a parent's expertise is essential in planning for each child. The school staff can help parents to realize their potential as full team members in order to further the child's educational achievement. According to Thousand and

Villa (1995: 289) in Vermont the first educational opportunities for children with disabilities came about through the efforts of individual parents and parent organizations. Their efforts led to the creation of private programs outside of public education. By the 1960s existing private schools that had been founded by the parent organizations became part of the public school system.

Daniels *et al.* (1995: 70) state that there is appreciable variation from one country to another in the extent to which parents have influenced their integration practice. For example, in Denmark following the government's invitation to parental organisations to participate in policy formation, parents were instrumental in securing changes which, over the following decade, resulted in increased educational provision for children with severe learning difficulties in ordinary schools. Also, there was an eventual transfer of responsibility for the education of these children from the Ministry of Social Affairs to the Ministry of Education.

In countries such as Canada, Norway, Spain, Sweden, the United Kingdom and the United States parents have also been influential over many years in their countries' moves toward integration. Their demand for integration stems from the belief that it helps reduce prejudice among ordinary people and enhances both educational progress and personal independence among the disabled (Daniels *et al.*, 1995: 70).

Van Dyke *et al.* (1995: 478) maintain that parental involvement has proved to be vital in inclusive classrooms. They discovered that most often when parents are informed

of what is taking place in the classroom, they will be supportive of the teacher. The extension of the classroom community to include parents leads to greater success.

2.7.3 Curriculum changes

The design of a new curriculum model is considered to be one of the most important factors in changing the teaching and learning process. According to Ullastres (1995: 194) in Spain the new curriculum had three main aims:

- * To allow teachers to develop their own initiatives when practising in the classroom.
- * To adapt the aims and educational content to existing scientific, social and technological realities.
- * To facilitate the adaptation of all students. For the first time in Spain the curriculum for disabled learners was included as part of the general curriculum.

According to Gilbert and Hart (1990: 50) integration could only be effective if pupils were provided with an appropriate curriculum to meet their needs. Such a curriculum involved the content of lessons, the range of resources, the style of presentation, the variety of pupil activities and the use of teachers' time.

2.8 CONCLUSION

From the above discussion, it is evident that inclusion is a reality in other parts of the world. It is also clear that inclusion is a multi-faceted task which needs careful planning and delivery, taking into account the necessary aspects which could make it succeed. With the view of the aims of this study in mind, the empirical research will focus on the identification of teachers' attitudes towards the inclusion of a mentally handicapped learner in the mainstream of education. The survey will also identify the regular teachers' needs and shortcomings with regard to inclusion, a fact which will give way to how to assist them.




CHAPTER 3

RESEARCH DESIGN

3.1 INTRODUCTION

Chapter 2 concentrated on the theoretical background to this research project. To complement the theoretical study an empirical research project was designed. An instrument was needed to collect relevant data from the sources concerned. For this purpose a questionnaire was designed to collect data from respondents.

3.2 THE RESEARCH INSTRUMENT



A questionnaire was formulated to collect data from teachers about their attitude toward the inclusion of a mentally handicapped learner in the mainstream of education. This was in line with the statement of Galfo (1975: 18) that questionnaires are used to obtain factual data, opinions and attitudes in a structured framework from respondents not contacted on a face to face basis.

Keaves (1988: 74 in Richard, 1996) maintains that a questionnaire is based on three assumptions, namely:

- * The respondent can read and understand the questionnaire items;

- * The respondent possesses the information to answer the questions or items; and
- * The respondent is willing to answer the questions or items honestly.

The following are requirements of a good questionnaire against which any questionnaire can be measured for reliability (Mouly, 1978: 233 in Mashimbye, 1992).

- * The questions must be formulated in such a manner that they say what they mean.
- * The questions must be planned and formulated to retrieve information that has been stated in the aim of the research project.
- * The questions must be formulated in such a way that no answer is suggested.
- * The questions must be sufficient to cover the whole research field.
- * Questions must be stated objectively and scientifically in such a way that the respondent feels free to answer them.
- * Questionnaires at all times must be handled confidentially.

This study deals with assessing the willingness and preparedness of regular teachers towards the inclusion of mentally handicapped learners in the mainstream of education. The following items concerning the input that the teachers make into assessing their attitude, were included in the questionnaire.

- * All learners can learn, including mentally handicapped learners, if instruction and materials meet their needs.

- * Teachers who had not learned about methods in special education during the course of their training feel anxious about the new responsibilities and problems caused by inclusion.
- * Inclusion of mentally handicapped learners can boost the relationship between them and ordinary learners.
- * Inclusion will help to reduce prejudice among ordinary learners towards handicapped learners.
- * The South African Schools Act (Act 84 of 1996) provides that a public school must admit learners and serve their educational requirements without unfairly discriminating against them in any way.
- * Inclusion of mentally handicapped learners in the mainstream of education will benefit their social development.
- * In-service training in special education methods will assist teachers to meet the new responsibilities and problems caused by inclusion.
- * Inclusion of mentally handicapped learners in the mainstream of education will benefit their emotional development.
- * To what extent do you agree with inclusion as an educational goal?
- * Teaching Learners with Special Educational Needs like mentally handicapped learners in the inclusive settings can be a rewarding endeavour.
- * Inclusion of mentally handicapped learners in the mainstream of education has beneficial effects on the above-mentioned learners.
- * Inclusion of mentally handicapped learners in the mainstream of education has beneficial effects on the normally achieving learners.

- * Inclusion of mentally handicapped learners in the mainstream of education will develop them academically.
- * With inclusion learners who were previously taught in special schools, like mentally handicapped learners, will be allowed as far as it is possible to attend an ordinary school.

3.3 RESPONDENTS

Teachers themselves were regarded as the best respondents as they are the persons who are directly involved in the inclusive education system with greater responsibilities and problems to face. In order to make a detailed and comparative analysis of the teachers' attitude, information about the following was requested from the respondents: gender, age, qualifications, classification category, post level, years of teaching experience, the grade mostly taught, average number of Learners with Special Educational Needs in a class, training for LSEN during basic training as a student teacher and special teachers' qualifications for the teaching of mentally handicapped learners.

Primary schools were chosen as a target group because Learners with Special Educational Needs, with specific reference to the mentally handicapped learners, show up as early as during the foundation phase. Early identification of these special educational needs during the primary school years will lead to early remediation which will be beneficial to the learner himself/herself and the teacher concerned.

A random sample of 20 primary schools was drawn, using a table of random numbers, from a population of 51 primary schools in Soshanguve. Soshanguve was chosen because of the feasibility of conducting research in the area and the likelihood of the researcher getting co-operation from schools in this area.

3.4 COLLECTING DATA

The researcher undertook to take the questionnaires to the various selected schools. An appointment was made with the principal of each selected school. The research project was discussed and explained to the principal. The majority of the principals were positive and keen to take part in the research project. One principal was also positive but was experiencing a very busy period at the school and was not able to take part during a set period. Another school could not be involved in the research project because of a lesser number of teachers at the school. It is a new school in a new settlement area with only five teachers and at least ten teachers per school were required to take part. As a result two schools were selected from the list of randomly selected reserve schools. Most schools responded well and the questionnaire was answered by the principals and the teachers. However, from some schools the number of completed questionnaires received was only eighty percent of those handed out.

The questionnaires received were checked for completeness and suitability. Those that were not complete or suitable were not accepted for purposes of analysis.

The questionnaires were then statistically analyzed by the Computer Centre of the Rand Afrikaans University. The data were checked for accuracy before the statistical analysis was started.

3.5 SUMMARY

The questionnaire attempted to assess the attitude of teachers towards the inclusion of learners with special educational needs with specific reference to the mentally handicapped learners and the support that they will need. In Chapter Four hypotheses will be formulated and tested either to support or not to support them. The findings will be analyzed and discussed.



CHAPTER 4

PRESENTATION AND INTERPRETATION OF RESEARCH DATA

4.1 INTRODUCTION

In Chapter Three the research instrument was discussed. A questionnaire was devised to gather data to substantiate the theory discussed in Chapter Two. In this chapter the research data will be analysed and interpreted.

4.2 INTERPRETATION OF THE BIOGRAPHICAL DATA OF THE RESPONDENTS



A questionnaire was sent to 20 primary schools which were selected randomly from a population of 51 primary schools in Soshanguve. Feedback was received from all the schools, although the number of completed questionnaires received from some of the schools was 80%. Of 200 questionnaires distributed 188 were returned. Of 188 questionnaires 174 were fully completed. The data is thus based on 174 questionnaires.

From the questionnaires returned and fully completed the following statistics were obtained:

27,6% of the questionnaires were completed by males while 72,4% were completed by females.

Of the 174 questionnaires completed 35,9% were completed by teachers aged between 23 and 30, 35,9% were completed by teachers aged between 31 and 40 and 28,4% were completed by teachers aged between 41 and 60.

Of the 174 questionnaires 74 teachers had a Diploma in Specialised Education and 96 had no Diploma in Specialised Education. 28 Teachers are in Categories A and B; 102 teachers are in Category C and 44 teachers are Categories D to F. 118 Teachers are on post level 1 while 56 teachers are between post level 2 to 4 (and over). 34,3% of teachers have between 0-5 years of teaching experience; 23,4% have between 6-10 years teaching experience and 42,6% have between 11-43 years of teaching experience. 48% of teachers teach grade 1 and 2; 37% teach grade 3 and 4; 61% teach grade 5 to 7. 82% of teachers have 0-2 learners with Special Educational Needs in their classrooms; 42% of teachers have 3 to 5 learners with Special Educational Needs; 50% have 6 and more learners with Special Educational Needs in their classes.

4.3 VALIDITY

Validity points to the degree or extent to which the questionnaire succeeds to measure what it is supposed to measure. The questionnaire was considered to comply with content validity. Bailey (1982: 70) stated that content validity answers the question

whether the instrument measures the kind of behaviour the researcher assumes it is doing. The items included in the questionnaire were formulated to ascertain whether each item reflected that which was given in the literature.

4.4 ANALYSIS OF RESULTS

Three factors will be used as scales in the further analyses. These factors were derived from the clustering of items included in the questionnaire. The hypotheses will be formulated to cover these three factors.

4.4.1 Factor 1

Inclusion aims to improve the social development and relationships of the mentally handicapped learner.

4.4.2 Factor 2

Inclusion is beneficial to all learners.

4.4.3 Factor 3

Inclusion and the teacher's position in his/her teaching career.

4.5 RANK-ORDER OF AVERAGES CONCERNING THE ATTITUDE OF TEACHERS TOWARDS THE INCLUSION OF MENTALLY HANDICAPPED LEARNERS IN THE MAINSTREAM OF EDUCATION

Table 4.1 Rank-order of averages concerning the attitude of teachers towards the inclusion of mentally handicapped learners in the mainstream of education

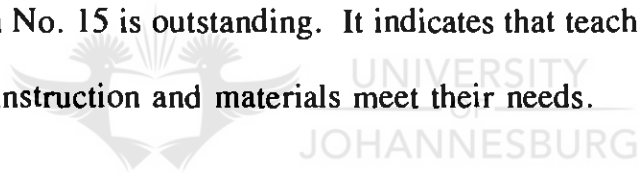
ITEM	AVERAGE	RANK ORDER
Inclusion aims to improve the social development and relationship of the mentally handicapped learner (Factor 1)		
Q6 Inclusion of mentally handicapped learners in the mainstream of education will benefit their social development.	3,63	3
Q7 Inclusion of mentally handicapped learners in the mainstream of education will benefit their emotional development.	3,38	4
Q8 Inclusion of mentally handicapped learners can boost the relationship between them and ordinary teachers.	3,79	1
Q9 Inclusion will help to reduce prejudice of ordinary learners towards handicapped learners.	3,69	2
Q11 Teaching Learners with Special Educational Needs like mentally handicapped learners in inclusive settings can be a rewarding endeavour.	3,10	6
Q12 To what extent do you agree with inclusion as an educational goal?	3,20	5
Inclusion is beneficial to all learners (Factor 2)		
Q1 The South African Schools Act (Act 84 of 1996) provides that a public school must admit learners and serve their educational requirement without unfairly discriminating in any way.	3,65	1
Q2 With inclusion, learners who were previously taught in special schools (like mentally handicapped learners), will be allowed as far as possible to attend an ordinary school.	2,22	5
Q3 Inclusion of mentally handicapped learners in the mainstream of education has beneficial effects on the above-mentioned learners.	2,98	2
Q4 Inclusion of mentally handicapped learners in the mainstream of education has beneficial effects on normally achieving learners.	2,89	3
Q5 Inclusion of mentally handicapped learners in the mainstream of education will develop them academically.	2,75	4
Inclusion and the teacher's position in his/her teaching career (Factor 3)		
Q13 Teachers who had not been trained in special education methods during the course of their training feel anxious about the new responsibilities and problems caused by inclusion.	3,82	2
Q14 In-service training in special education methods will assist teachers to meet the new responsibilities and problems caused by inclusion.	3,62	3
Q15 All learners can learn, including mentally handicapped learners, if instruction and materials meet their needs.	4,45	1

According to the table of rank-order above the averages of the individual questions in each factor differ. Some questions have high averages whilst others have low ones.

In Factor 1 Question No. 8 is outstanding. It shows that teachers believe that inclusion of mentally handicapped learners can boost the relationship between them and ordinary learners to further improve their social development and relationship.

In Factor 2 Question No. 1 is outstanding. It states that the South African Schools Act (Act 84 of 1996) provides that a public school must admit learners without unfairly discriminating in any way, making education beneficial to all learners.

In Factor 34 Question No. 15 is outstanding. It indicates that teachers believe that all learners can learn if instruction and materials meet their needs.



4.6 WHAT IS AN HYPOTHESIS?

An hypothesis is an explanation, a testable and clear statement, usually derived from theory or also from direct observation. Cohen and Holliday (1979: 116) assert that hypotheses are hunches that a researcher has about the existence of a relationship between two or more variables. The researcher puts into words what he or she expects the relationship between these variables to be. When hypotheses are tested the aim is either to reject or support these provisional explanations of the relationships within known levels of certainty.

Hypotheses in terms of the following dependent variables are stated: gender, age, qualification, classification category, post level, years of teaching experience, the grade mostly taught and average number of Learners with Special Educational Needs in a classroom.

In comparing two groups in terms of the items per factor Hotelling's T-square test is used. If statistical significant multivariable differences between two groups are found, the univariable differences are investigated by using the student-t test. Statistical significant differences are reported at the 1% and 5% levels of significance.

In the comparison of three or more groups' statistical significant multi-variable differences are tested using Multi-variable Analysis of Variance (MANOVA). Univariable differences are, in this case, investigated using the Analysis of Variance (ANOVA).

4.6.1 General hypothesis: two groups with reference to multi- and uni-variable differences tested by means of hotelling's t-square and student t-tests

Table 4.2 General hypothesis: two groups with reference to multi- and uni-variable differences tested by means of hotelling's t-square and student t-tests

DIMENSION	VARIABLE	SYMBOL	DESCRIPTION	TEST	
Multi-variable analysis	Groups * gender * qualification * post level	HoT	The average item scores for all items together when two groups are compared do not differ statistically in terms of the teachers' attitude toward the inclusion of mentally handicapped learners in the mainstream of education that:	Hotelling T ²	
			* male and female teachers have the same attitude toward inclusion		
			* teachers with a Diploma in Special Education have the same attitude toward inclusion than those without a diploma		
				* teachers in the lowest post level have the same attitude toward inclusion than those in higher post levels	
			HaT	The average item scores for all items together when two groups are compared differ statistically significantly in terms of the teachers' attitudes toward the inclusion of mentally handicapped learners in the mainstream of education that:	
				* male and female teachers do not have the same attitude toward inclusion	
			* teachers with a Diploma in Special Education have a different attitude toward inclusion than those without a diploma		

			* teachers in the lowest post level have a different attitude toward inclusion than those in higher post levels	
Uni-variable analysis	* gender * qualification * post level	Hot	The average item scores for all items together when two groups are compared do not differ statistically significantly in terms of the teachers' attitude toward the inclusion of mentally handicapped learners in the mainstream of education that:	Student-t
			* male and female teachers have the same attitude toward inclusion	
			* teachers with a Diploma in Special Education have the same attitude toward inclusion than those without a diploma	
			* teachers in the lowest post level have the same attitude toward inclusion than those in higher post level	
		Hat	The average item scores for all items together when two groups are compared differ statistically significantly in terms of the teachers' attitude toward the inclusion of mentally handicapped learners in the mainstream of education that:	
			* male and female teachers do not have the same attitude toward inclusion	
			* teachers with a Diploma in Special Education have a different attitude toward inclusion than those without a Diploma	
			* teachers in the lowest post level have a different attitude toward inclusion than those in higher post levels	

4.6.2 General hypotheses: three or more groups with reference to multi- and uni-variable differences tested using MANOVA and ANOVA tests

Table 4.3 General hypotheses: three or more groups with reference to multi- and uni-variable differences tested using MANOVA and ANOVA tests

DIMENSION	VARIABLE	SYMBOL	DESCRIPTION	TEST
Multi-variable analysis	<ul style="list-style-type: none"> * Age * Classification category * Teaching experience * Grade taught * Number of LSEN 	HoM	The average scores for all the items together for the compared groups tested together do not differ statistically significantly in terms of the teachers' attitude toward the inclusion of mentally handicapped learners in the mainstream of education that:	MANOVA
			* teachers in different age groups have the same attitude toward the inclusion of mentally handicapped learners	
			* teachers in different categories have the same attitude toward inclusion	
			* teachers with different years of teaching experience have the same attitude toward inclusion	
			* teachers teaching different grades have the same attitude toward inclusion	
			* teachers with different numbers of LSEN in their classrooms have the same attitude toward inclusion	
			HaM	
* teachers in different age groups have differing attitudes toward the inclusion of mentally handicapped learners				

			* teachers in different categories have differing attitudes toward inclusion	
			* teachers with different years of teaching experience have differing attitudes toward inclusion	
			* teachers teaching different numbers of LSEN in their classrooms have differing attitudes toward inclusion	
Uni-variable analysis	<ul style="list-style-type: none"> * Age * Classification category * Teaching experience * Grade taught * Number of LSEN 	HoA	The average item scores for all the items together for the compared groups tested together do not differ statistically significantly in terms of the teachers' attitude toward the inclusion of mentally handicapped learners in the mainstream of education that:	ANOVA
			teachers in different age groups have the same attitude toward the inclusion of mentally handicapped learners	
			* teachers in different categories have the same attitude toward inclusion	
			* teachers with different years of teaching experience have the same attitude toward inclusion	
			* teachers teaching different grades have the same attitude toward inclusion	
			* teachers with different number of LSEN in their classrooms have the same attitude toward inclusion	
		HaA	The average item scores for all the items together for the compared groups tested together differ statistically significantly in terms of the teachers' attitude toward the inclusion of mentally handicapped learners in the mainstream of education that:	

			* teachers in different age groups have differing attitudes toward the inclusion of mentally handicapped learners	
			* teachers in different categories have differing attitudes toward inclusion	
			* teachers with different years of teaching experience have differing attitudes toward inclusion	
			* teachers teaching different grades have differing attitudes toward inclusion	
			* teachers with different numbers of LSEN in their classrooms have differing attitudes toward inclusion	

4.7 TABLING AND INTERPRETATION OF EMPIRICAL DATA

Table 4.4 Differences between male and female teachers with regard to their attitude toward the inclusion of mentally handicapped learners in the mainstream of education

ASPECT	GENDER	NUMBER	AVERAGE	HOTELLIN G P-VALUE	STUDENT P-VALUE
Inclusion improves the social development and relationship of the mentally handicapped learner (Factor 1)	male	48	22,42		0 - 042
	female	124	20,13		
Inclusion is beneficial to all learners (Factor 2)	male	48	14,81		0.328
	female	124	14,37		
Inclusion and the teacher's position in his/her teaching career (Factor 3)	male	48	12,98	0,403	0.226
	female	124	12,59		

According to Table 4.4 HoT is supported and HaT rejected. This indicates that there is no statistical significant difference between the male and female teachers with regard to their attitude toward the inclusion of a mentally handicapped learner in the mainstream of education. The sex of the teacher has no bearing in this regard.

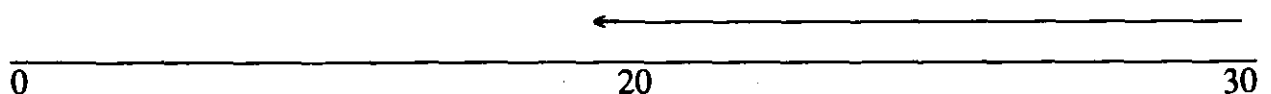
Degrees of agreement between the items of the 3 factors in Table 4.4

In Factor 1 there are 6 questions each scaled on a 5 point scale:

Factor 1 = Max - scale: $6 \times 5 = 30$

Min - scale: $6 \times 1 = 6$

In the case of Factor 1 the line below indicates the agreement of teachers with the aspects of Factor 1 ranging from the minimum of 6 to the maximum of 30. The arrow indicates the teachers' degree of agreement between the two extremes (i.e. 6 and 30). From 6 to 18 is the area of disagreement; from 19 to 30 is the area of agreement. The arrow points from the area of agreement, i.e. 30, to the area of disagreement, i.e. 6 because the researcher is interested in area of agreement. The number 20 indicates the teachers' degree of agreement.

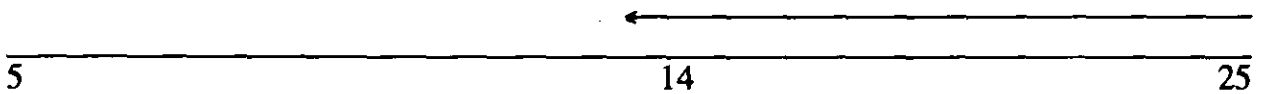


In Factor 2 there are 5 questions each scaled on a 5 point scale:

$$\text{Factor 2} = \text{Max - scale: } 5 \times 5 = 25$$

$$\text{Min - scale: } 5 \times 1 = 5$$

In the case of Factor 2 from 5 to 15 is the area of disagreement; from 16 to 25 is the area of agreement. The number 14 indicates the teachers' degree of disagreement.

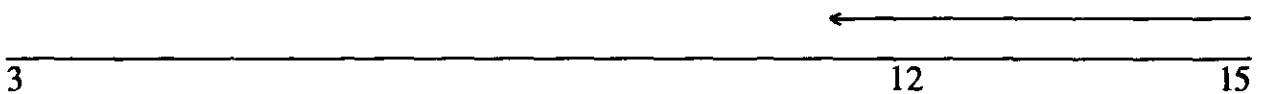


In Factor 3 there are 3 questions each scaled on a 5 point scale:

$$\text{Factor 3} = \text{Max - scale: } 3 \times 5 = 15$$

$$\text{Min - scale: } 3 \times 1 = 3$$

In the case of Factor 3 from 3 to 9 is the area of disagreement; from 10 to 15 is the area of agreement. The number 12 indicates the teachers' degree of agreement.



The analysis of the items of the 3 factors above with regard to the teachers' attitude toward the inclusion of mentally handicapped learners in the mainstream of education indicates that teachers agree on average about Factor 3, less so on Factor 1 and even less on Factor 2.

This means that all teachers agree on average that inclusion can improve the social development and relationship of the mentally handicapped learner. In other words these teachers agree that by inclusion the social development and relationships of the mentally handicapped learner can improve, but with reservations.

All teachers are quite hesitant to state whether inclusion is beneficial to all learners. In other words there is doubt whether inclusion is beneficial to all learners. They do, however, feel that, given the training in special education and the provision of the necessary materials, inclusion can be handled to some extent by regular teachers.

Table 4.5 Differences between teachers of different ages with regard to their attitude toward the inclusion of mentally handicapped learners in the mainstream of education

ASPECT	AGE	NUMBER	AVERAGE	MANOVA	ANOVA
Inclusion improves the social development and relationship of the mentally handicapped learner (Factor 1)	23 - 30	61	22,20		0,181
	31 - 40	61	19,66		
	41 --	49	20,35		
Inclusion is beneficial to all learners (Factor 2)	23 - 30	62	15,50	0,403	0,159
	31 - 40	61	13,49		
	41 --	48	14,42		
Inclusion and the teacher's position in his/her teaching career (Factor 3)	23 - 30	62	12,95		0,151
	31 - 40	62	12,08		
	41 --	49	13,10		

According to Table 4.5 HoT is supported and HaT rejected. This indicates that there is no statistical significant difference between teachers of different age groups with regard to their attitude toward the inclusion of a mentally handicapped learner in the mainstream of education. Age has no bearing on how teachers judge the inclusion of mentally handicapped learners in the mainstream of education.

Table 4.6 Differences between teachers in different qualification groups with regard to their attitude toward the inclusion of mentally handicapped learners in the mainstream of education

ASPECT	DIPLOMA	NUMBER	AVERAGE	S	HOTELLING P-VALUE	STUDENT P-VALUE
Inclusion improves the social development and relationship of the mentally handicapped learner (Factor 1)	Yes	74	20,61	7,62		0,407
	No	94	20,89	7,92		
Inclusion is beneficial to all learners (Factor 2)	Yes	75	14,36	5,58	0,560	0,359
	No	93	14,69	6,10		
Inclusion and the teacher's position in his/her teaching career (Factor 3)	Yes	74	12,35	3,15		0,084
	No	96	12,99	2,85		



According to Table 4.6 HoM is supported and HaM rejected. This indicates that there is no statistical significant difference between teachers with different qualifications with regard to their attitude toward the inclusion of a mentally handicapped learner in the mainstream of education. Whether a teacher has a Diploma in Special Education or not the attitude toward the inclusion of a mentally handicapped learner in the mainstream of education remains the same. The qualification of a teacher has no bearing in this regard.

Table 4.7 Differences between teachers in different classification categories with regard to their attitude toward the inclusion of mentally handicapped learners in the mainstream of education

ASPECT	CLASS CATEGORY	NUMBER	AVERAGE	MANOVA	ANOVA
Inclusion improves the social development and relationship of the mentally handicapped learner (Factor 1)	A, B, C,	28	22,86		0,270
	D, E, F	100	20,56		
		44	19,91		
Inclusion is beneficial to all learners (Factor 2)	A, B, C,	27	15,59	0,500	0,363
	D, E, F	101	13,99		
		44	14,98		
Inclusion and the teacher's position in his/her teaching career (Factor 3)	A, B, C,	28	13,25		0,535
	D, E, F	102	12,66		
		44	12,43		

According to Table 4.7 HoM is supported and HaM rejected. This indicates that there is no statistical significant difference between the teachers in different classification categories with regard to their attitude toward the inclusion of a mentally handicapped learner in the mainstream of education. Classification category has no bearing on how teachers judge the inclusion of mentally handicapped learners in the mainstream of education, whether in a high or a low classification category, the teachers' attitude remains the same.

Table 4.8 Differences between the different post levels of teachers with regard to their attitude toward the inclusion of mentally handicapped learners in the mainstream of education

ASPECT	POST LEVEL	NUMBER	AVERAGE	S	HOTELLING P-VALUE	STUDENT P-VALUE
Inclusion improves the social development and relationship of the mentally handicapped learner (Factor 1)	1	116	21,11	7,50		0,202
	2	56	20,05	8,36		
Inclusion is beneficial to all learners (Factor 2)	1	116	14,74	5,75	0,764	0,211
	2	56	13,98	5,92		
Inclusion and the teacher's position in his/her teaching career (Factor 3)	1	118	12,82	2,92		0,215
	2	56	12,43	3,36		



According to Table 4.8 HoT is supported and HaT rejected. This indicates that there is no statistical significant difference between the post level of teachers with regard to their attitude toward the inclusion of a mentally handicapped learner in the mainstream of education. Teachers in higher post levels and those that are in lower post levels have the same attitude toward the inclusion of mentally handicapped learners. Post level has no bearing in this regard.

Table 4.9 Differences between teaching experience with regard to their attitude toward the inclusion of mentally handicapped learners in the mainstream of education

ASPECT	TEACHING EXPERIENCE	NUMBER	AVERAGE	MANOVA	ANOVA
Inclusion improves the social development and relationship of the mentally handicapped learner (Factor 1)	0 - 5 years	57	21,35		0,642
	6 - 10 years	40	21,08		
	11+ years	73	20,11		
Inclusion is beneficial to all learners (Factor 2)	0 - 5 years	57	14,79	0,769	0,907
	6 - 10 years	41	14,34		
	11+ years	72	14,39		
Inclusion and the teacher's position in his/her teaching career (Factor 3)	0 - 5 years	59	12,58		0,788
	6 - 10 years	40	12,58		
	11+ years	73	12,90		



According to Table 4.9 HoM is supported and HaM rejected. This indicates that there is no statistical significant difference between the teachers' years of teaching experience with regard to their attitude toward the inclusion of a mentally handicapped learner in the mainstream of education. Experience shows no relationship regarding the teachers' attitude about inclusion of mentally handicapped learners. Inexperienced and very experienced teachers agree on the same level in this regard.

Table 4.10 Differences between the grades taught mostly by teachers with regard to their attitude toward the inclusion of mentally handicapped learners in the mainstream of education

ASPECT	GRADE TAUGHT	NUMBER	AVERAGE	MANOVA	ANOVA
Inclusion improves the social development and relationship of the mentally handicapped learner (Factor 1)	1, 2, 3, 4, 5, 6, 7	47 37 63	19,04 20,14 22,43		0,061
Inclusion is beneficial to all learners (Factor 2)	1, 2, 3, 4, 5, 6	47 38 63	14,85 14,11 14,32	0,041*	0,823
Inclusion and the teacher's position in his/her teaching career (Factor 3)	1, 2, 3, 4, 5, 6, 7	48 37 63	11,90 12,57 13,27		0,069

* 5% level of significance

According to Table 4.10 HoM is rejected in favour of HaM at the 5% level of significance.. This indicates that there is a statistical significant difference between the Grade mostly taught by teachers with regard to their attitude toward the inclusion of a mentally handicapped learner in the mainstream of education (MANOVA). However, it is impossible to indicate where (in which factor) the differences are (ANOVA). In the latter case HaA is rejected in favour of HoA.

Table 4.11 Differences between the average number of learners with special educational needs (LSEN) in a classroom with regard to their attitude toward the inclusion of mentally handicapped learners in the mainstream of education

ASPECT	NUMBER OF LSEN	NUMBER	AVERAGE	MANOVA	ANOVA
Inclusion improves the social development and relationship of the mentally handicapped learner (Factor 1)	0 - 1	81	20,46		0,746
	2 - 5	41	20,51		
	6 --	50	21,48		
Inclusion is beneficial to all learners (Factor 2)	0 - 1	80	14,41	0,041*	0,977
	2 - 5	42	14,48		
	6 --	50	14,64		
Inclusion and the teacher's position in his/her teaching career (Factor 3)	0 - 1	82	12,07		0,038*
	2 - 5	42	13,14		
	6 --	50	13,34		

* 5% level of significance

According to Table 4.11 HoM is rejected in favour of HaM at the 5% level of significance for all items grouped together. This indicates that there is a statistical significant difference between the average number of Learners with Special Educational Needs taught by regular teachers with regard to the teachers' attitude toward the inclusion of a mentally handicapped learner in the mainstream of education (MANOVA). The number of LSEN in a class affects the teacher's teaching position. The smaller the number, the less a teacher has a problem to accommodate them in the regular classroom.

4.8 CONCLUSION

In this chapter the empirical data were presented, tabled, analysed and interpreted. In the following chapter a summary of the findings will be presented. There will also be a critical evaluation of the research project. Recommendations will also be given.



CHAPTER 5

SUMMARY AND RECOMMENDATIONS

5.1 INTRODUCTION

The data obtained from the questionnaires completed by teachers, were analysed in Chapter Four. In this chapter the findings are summarised. Recommendations will also be made on the basis of the findings and a critical look at the research as a whole will be taken.

5.2 SUMMARY



In Chapter One the aim of the research was to determine how regular teachers judge the inclusive education system and how willing and prepared they are for the inclusion of the mentally handicapped learners in this system. This research was conducted by means of an empirical study based on a literature study.

In the central statement to this research (see Chapter One), the researcher stated that with inclusive education a Learner with Special Educational Needs, like a mentally handicapped learner, will under certain conditions benefit from the academic programme to the best of his/her ability and will be capable of satisfactory social adjustment which will allow him/her to lead a life that will be socially approved and

stigma-free. Also, a mentally handicapped child should have a lifestyle as close to normal as possible and will have rights guaranteed to any citizen subject to the test of performance.

In Chapter Two the research for the theoretical background to this study was done. There is currently sufficient evidence that inclusion exists and it is a success in some parts of the world. The Gauteng Department of Education has adopted a policy of Inclusive Education. This is reflective of positions arrived at via the National Education Policy Investigation (NEPI) process, the ANC's Framework for Education's (DNE) recommendations on Specialised Education (Discussion Document, 1996: 12).

The Gauteng School Education Act, 1995 (Act 6 of 1995), creates the legal environment that enables the implementation of Inclusive Education.

Three factors have been used in the analysis of the research data. According to Table 4.8, question 8 in Factor 1 had the highest average. It reflects that inclusion of mentally handicapped learners can boost the relationship between them and ordinary learners.

Question 1 in Factor 2 had the highest average. It reflects that the South African Schools Act (Act 84 of 1996) provides that a public school must admit learners and serve their educational requirement without unfairly discriminating in any way.

Question 15 in Factor 3 had the highest average. It states that all learners can learn, including mentally handicapped learners, if instruction and materials meet their needs. Question 15 also had the highest average scaled score and it shows how inclusion determines the teacher's position in his/her teaching.

According to Table 4.4, male and female teachers showed no differences with regard to the inclusion of a mentally handicapped learner in the mainstream of education.

The same applies to teachers in different age groups (Table 4.5), teachers who have different qualifications (Table 4.6), teachers in different categories (Table 4.7), teachers on different post levels (Table 4.8), teachers with differences in teaching experience (Table 4.9) and teachers teaching different grades (Table 4.10).

The average number of LSEN in a classroom (Table 4.11) showed to have some bearing on teachers' attitude toward the inclusion of a mentally handicapped learner in the mainstream of education. The smaller the number of Learners with Special Educational Needs in a regular classroom the less teachers will have a problem to teach them adequately.

5.3 TEACHERS' VIEWS ABOUT INCLUSION

Teachers who had not studied special education methods during the course of their training feel anxious about the new responsibilities and problems caused by inclusion.

They also indicated that all learners can learn if instruction and materials meet their needs.

All teachers are unanimous in their attitude regarding inclusion of mentally handicapped learners in the mainstream of education. The findings of this study is indicative of the position of the regular classroom teachers about their attitude toward the inclusion of mentally handicapped learners in the mainstream of education.

5.4 RECOMMENDATIONS

Special schools will, according to Burden (1995: 27), have to be used as resource or in-service training centres for teacher or community learning and development. They may also be used as regular schools. Suitably trained special school teachers or other professionals will have to be used as resource personnel responsible for supervision and as facilitators in a few neighbourhood schools. All children of a specific neighbourhood will have to go to the same school and nobody will, as far as possible, be excluded.

The children will, as far as it is possible, have to be grouped in classes according to chronological age. The ratio of children per teacher should be such as to enable teachers to give proper attention to the needs of each child. The community as a whole will have to be involved and committed to the cause, because success will depend on a total change of mind-set. Individual needs of all children will have to be

addressed in a very specific manner. Assessment and evaluation approaches will have to be changed. Facilities will have to be suitable for all and teaching aids will have to be functional and available to all.

According to Lazarus and Donald (1995: 51) the curriculum will have to be totally readapted, reflecting contextual aspects as well as the input from different disciplines and sectors of life. Hence *Curriculum 2005* and its *Outcomes Based Education* should include these aspects to address the inclusion of LSEN in the mainstream of education. Programmes and facilities, according to Meyer *et al.* (1994: 21-22), will have to be constantly monitored and assessed according to certain criteria.

Financial issues as supported by Lazarus and Donald (1995: 51) will have to be addressed carefully so as to be cost-effective and not fall prey to all sorts of malpractices.

5.4.1 Guidelines to educational psychologists in dealing with the issue

To be effective as a consultant the educational psychologist needs to draw upon expert knowledge and skills in order to help resolve specific problems. Such an approach relies upon careful accurate diagnosis so that the appropriate technical expertise is forthcoming, and clear and understandable communication to the client is given in order for successful implementation to be effected (Wolfendale, 1992: 72).

The following are guidelines for practice in a school (Wolfendale, 1992: 77):

- a) Educational psychologists should not assume they have skills in all areas of consultancy and they should also refer to relevant people when necessary.
- b) Schools have a long history and are always in a process of change. Consultants enter a dynamic institution and should not dismiss previous and ongoing development.
- c) The terms of entry, scope of the problem to be addressed, personnel involved, timing and duration of visits and the intended outcome should be negotiated and formalized in a written contract. This should also include a statement about the nature of the confidentiality which will be observed.
- d) All personnel who are affected by the issue under consultation should be invited to be involved.
- e) Consultation time should not be wasted gathering information which can be found elsewhere.
- f) Consultation sessions should always be arranged in advance.
- g) At the end of every consultation exercise a written report should be available which includes any recommendations for action.
- h) Consultants should provide answers at the end of the exercise only, and only then if it was initially agreed upon.

5.5 SHORTCOMINGS OF THIS RESEARCH PROJECT

5.5.1 The research project neglected the financial implications related to the implementation of inclusion of LSEN into the mainstream of education. Teachers could have been asked concerning this issue.

5.5.2 It did not refer to the curriculum in relation to components related to integration of LSEN into the mainstream of education.

5.5.3 It also did not address the training of educators with regard to inclusion of LSEN in the mainstream of education.

5.5.4 The researcher has only polled the teachers in Soshanguve.

5.6 TOPICS FOR FURTHER RESEARCH

The following research topics could serve as aims for further research:

5.6.1 Determine the financial implications related to the implementation of inclusion of mentally handicapped learners into the mainstream of education.

5.6.2 Explore and describe the curriculum in relation to components related to the integration of LSEN into the mainstream of education.

5.6.3 Explore and describe the training of educators with regard to inclusion of LSEN in the mainstream of education.

5.6.4 Determine how other educators in various education institutions together with parents and learners themselves judge the inclusive education system.

5.7 CONCLUSION

Inclusion in South Africa is a new concept which came into being with the dawn of democracy which superseded the apartheid era. The latter regime based its education system on segregation in terms of colour, race and creed. The process of segregation further excluded Learners with Special Educational Needs such as mentally handicapped learners from the mainstream of education. This is to be transformed through inclusion.

The South African position on inclusion is a hopeful one which is already entrenched in the Constitution. It lays the foundation for the process of inclusion. Taking into account that inclusive education is practised in other countries, South Africa has to consider linking with those countries in order to succeed in her new endeavour.

BIBLIOGRAPHY

Ainscow, M. 1997. *British Journal of Special Education*, 24(1).

Ainscow, M. and Sebba, J. 1996. *Cambridge Journal of Education*, 26(1). Special Issue: International Developments in Inclusive Education.

Alper, S., Schloss, P.J., Etscheidt, S.K. and Macfarlane, C.A. 1995. *Inclusion. Are we abandoning or helping students?* USA: Corwin Press, Inc.

Bailey, K.D. 1982. *Methods of Social Research*. New York: The Free Press.

Banerji, M. and Dailey, R.A. 1995. *Journal of Learning Disabilities*, 28(8): 511-522.

Bennett, N. and Cass, A. 1989. *From Special to Ordinary Schools. Case studies in Integration*. Great Britain: Camelot Press.

Bradley, D.F., King-Sears, M.E. and Tessier-Switlick, D.M. 1997. *Teaching students in Inclusive settings from Theory to Practice*. USA: Allyn & Bacon.

Brucker, P.O. 1994. *Journal of Learning Disabilities*, 27(9): 581-582.

Burden, A. 1995. *Kleuterklanke* 20(1). UNISA: Department of Orthopedagogics.

Child, D. 1993. *Psychology and the teacher*. Great Britain: Redwood Books.

Choate, J.S. 1997. *Successful Inclusive Teaching. Proven ways to detect and correct special needs*. USA: Allyn & Bacon.

Cohen, L. and Holliday, M. 1979. *Statistics for Education and Physical Education*. London: Harper & Row.

Curzon, L.B. 1990. *Teaching in Further Education: An outline of Principles and Practice*. Great Britain: Alden Press.

Daniels, H., Lebanon, D. and McGovern, M.A. 1995. *Integrating students with Special Needs into Mainstream School*. Paris: Organisation for Co-operation and Development.

Denzin, N.K. and Lincoln, Y.S. 1994. *Handbook of Qualitative Research*. Beverly Hills: Sage.

Department of Education, 1997. *Understanding the South African Schools Act*.

Discussion Document on Inclusion. 1996.

Draft Gauteng School Education Bill. 1995.

Du Toit, A. 1991. *Towards Democracy: Building a culture of accountability in South Africa*. Cape Town: Idasa.

Du Toit, S.J. and Kruger, N. 1991. *The Child: An Educational Perspective*. Pietermaritzburg: Interpak.

Galfo, A.J. 1975. *Interpreting Educational Research*. New York: M.C. Brown Publishers.

Gilbert, C. and Hart, M. 1990. *Towards Integration: Special Needs in an ordinary School*. London: Kogan Page Limited.

Government Gazette, 1996: 377 (17579). Cape Town. 15 December 1996.

Hegarty, S. 1995: *Integrating Students with Special Needs into Mainstream Schools*. London: Routledge.

Lazarus, S. and Donald, D. 1995. The development of education support services in South Africa: the process of transition: goals and strategies. *South African Journal of Education*, 15(1): 52-57.

Mashimbye, N.M. 1992. *Careers Education in Gazankulu - A case study*. Johannesburg: Rand Afrikaans University (M.Ed. dissertation).

Meyer, L.H., Grenot-Scheyer, M., Harry, B., Park, H. and Schwartz, I. 1994. Inclusive schools and communities for children and youth with diverse abilities. *The Association for Persons with Severe Handicaps* 20(1): 16-22.

O'Hanlon, C.W. 1995. *Inclusive Education in Europe*. Great Britain: David Fulton.

Pijl, S.J. and Meijer, C.J.W. 1997. *Inclusive Education. A global agenda*. Great Britain: T.J. Press (Padstow) Ltd.

Provincial Gazette Extraordinary. 1995. *School Education Act, 1995* 1(113). Pretoria, 8 December 1995.

Richard, V.S. 1996. *Evaluation Responsibilities of Teachers*. Johannesburg: Rand Afrikaans University (M.Ed. Dissertation).

Roach, V. 1995. *Phi Delta Kappan* 76(6).

Rogers, J. 1993. The Inclusion Revolution. *Research Bulletin, Phi Delta Kappa* 11: 1-6.

Seifert, K.L. 1991. *Educational Psychology* 2nd Ed. USA: Houghton Mifflin Company.

Smith, J.D. 1994. *Education and Training in Mental Retardation and Developmental Disabilities* 29(3).

Tavernor, S., Hardman, F. and Skidmore, D. 1997. *British Journal of Special Education*, 24(7).

Taylor, R.L. and Sternberg, L. 1989. *Exceptional Children: Integrating Research and Teaching*. USA: Springer-Verlag New York Inc.

Thousand, J.S. and Villa, R.A. 1995. *Phi Delta Kappan* 77(4).

Tignor, G.V. 1995. *The High School Magazine*, 2(4).

Ullastres, A.M. 1995. *Prospects: Quarterly Review of Comparative Education*, 25(2): 189-199.

UNESCO, 1994. Final Report, World Conference on Special Needs Education: Access and Quality. Salamanca, Spain, 7-10 June 1994.

Van Dyke, R., Stallings, M.A. and Colley, K. 1995. *Phi Delta Kappan* 76(6).

Van Niekerk, P.A. 1986. *Die Opvoedkundige Sielkundige*. Stellenbosch: Universiteitsuitgewers en Boekhandelaars.

Vrey, J.D. 1979. *The Self-Actualizing Educand*. South Africa: UNISA.

Wilczenski, F.L. 1992. *Psychology in the Schools*, 29(4).

Wolfendale, S. 1992. *The Profession and Practice of Educational Psychology: Future Directions*. London: Cassell.



APPENDIX



DEPARTMENT OF EDUCATIONAL SCIENCES

Dear Teachers

A study is currently done to ascertain the attitude of teachers towards inclusion/inclusive education. You are therefore requested to respond to the questions set below, which are applicable to this investigation.

Will you be so kind as to help us in this investigation? Your input is important for the structuring the education system in this regard. This questionnaire should take approximately 12 minutes of your time.

When answering the questions you need only circle the number on the scale to indicate the extent to which you agree or disagree with the statement. A ONE means that you totally disagree with the statement and a FIVE means that you fully agree with the statement.

Your co-operation is voluntary and will be greatly appreciated. Thank you.

Before you start, please keep the following in mind when you complete the questionnaire:

- * Do not write your name on the questionnaire; you remain anonymous.
- * There are no correct or incorrect answers - we require only your honest opinion.
- * Please answer all the questions.
- * If you would like to change an answer, do so by clearly crossing out the incorrect one.
- * Please return this questionnaire on completion to the person from whom it was received.

N.B.: This questionnaire will be directly computerised for statistical analysis by a university. Thereafter questionnaires will be destroyed. No other person than the researcher will at any time have access to this questionnaire. The outcome of the research will be published in a scientific journal.

Thank you once again for your friendly assistance.

P. NTULI
RESEARCHER

For office use only

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 (1)

Kindly complete the following personal particulars.

1. Gender

Male	1
Female	2

 (2)

2. Age

--	--

 Years (3-4)

3. Qualifications:

a) Do you have a diploma in specialised education?

Yes	1
No	2

 (5)

b) Do you have a degree?

Yes	1
No	2

 (6)

c) Do you have a post graduate degree?

Yes	1
No	2

 (7)

4. Your classification category

A	1
B	2
C	3
D	4
E	5
F	6

 and over (8)

5. Your post level

1
2
3
4

 and over (9)

6. Years of teaching experience

--	--

Years (10-11)

7. The Grade I teach mostly is Grade

1
2
3
4
5
6
7

(12)

8. Average number of Learners with Special Educational Needs in your class/es if any

0-1
2
3
4
5
6
7
8
9

and more (13)

9. Were you trained for Learners with Special Educational Needs during your basic training as a student teacher?

Yes	1
No	2

(14)

10. Do you have a special teachers' qualification for the teaching of mentally handicapped learners particularly?

Yes	1
No	2

(15)



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* **Inclusion means that Learners with Special Educational Needs (LSEN) including mentally handicapped learners will, as far as it is possible, be educated in the mainstream of education/normal school.**

* To what extent do you agree or disagree with the following statements:

1 = Disagreement to 5 = Full agreement

1. The South African Schools Act, Act NO. 84 of 1996 provides that a public school must admit learners and serve their educational requirements without unfairly discriminating in any way.

Disagree

1	2	3	4	5
---	---	---	---	---

 Agree (16)

2. With inclusion, learners who were previously taught in special schools like mentally handicapped learners, will be allowed as far as it is possible to go to any ordinary school.

Disagree

1	2	3	4	5
---	---	---	---	---

 Agree (17)

3. Inclusion of mentally handicapped learners in the mainstream of education has beneficial effects on the afore mentioned learners

Disagree

1	2	3	4	5
---	---	---	---	---

 Agree (18)

4. Inclusion of mentally handicapped learners in the mainstream of education has beneficial effects on the normal achieving learners.

Disagree

1	2	3	4	5
---	---	---	---	---

 Agree (19)

5. Inclusion of mentally handicapped learners in the mainstream of education will develop them academically.

Disagree

1	2	3	4	5
---	---	---	---	---

 Agree (20)

6. Inclusion of mentally handicapped learners in the mainstream of education will benefit their social development.

Disagree

1	2	3	4	5
---	---	---	---	---

 Agree (21)

7. Inclusion of mentally handicapped learners in the mainstream of education will benefit their emotional development.

Disagree

1	2	3	4	5
---	---	---	---	---

 Agree (22)

8. Inclusion of mentally handicapped learners can boost the relationship between them and ordinary learners.

Disagree

1	2	3	4	5
---	---	---	---	---

 Agree (23)

9. Inclusion will help to reduce prejudice among ordinary learners towards handicapped learners.

Disagree

1	2	3	4	5
---	---	---	---	---

 Agree (24)

10. Teaching Learners with Special Educational Needs (like mentally handicapped learners) in inclusive settings is frustrating.

Disagree

1	2	3	4	5
---	---	---	---	---

 Agree (25)

11. Teaching Learners with Special Educational Needs like mentally handicapped learners in inclusive settings can be a rewarding endeavour.

Disagree

1	2	3	4	5
---	---	---	---	---

 Agree (26)

12. To what extent do you agree with inclusion as an educational goal?

Disagree

1	2	3	4	5
---	---	---	---	---

 Agree (27)

13. Teachers who had not learned about methods in special education during the course of their training feel anxious about the new responsibilities and problems caused by inclusion.

Disagree

1	2	3	4	5
---	---	---	---	---

 Agree (28)

14. Inservice training in special education methods will assist teachers to meet the new responsibilities and problems caused by inclusion.

Disagree

1	2	3	4	5
---	---	---	---	---

 Agree (29)

15. All learners can learn, including mentally handicapped learners, if instruction and materials meet their needs.

Disagree

1	2	3	4	5
---	---	---	---	---

 Agree (30)

Thank you once more for being a participant in this research!

