

**EDUCATOR TRAINING AND SUPPORT FOR INCLUSIVE  
EDUCATION**

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## ABSTRACT

When the implementation of inclusive education was announced by government, it did not come without shared concerns by many parents, educators, lecturers, specialists and learners about the future of the educational system in South Africa. Research needs to be done in order to address these concerns.

The present study aims to address some of those concerns as well as to investigate what is provided to mainstream educators in terms of training, support and skills in three schools in the Cape Winelands district of the Western Cape Education Department. These educators have all previously received training in inclusive education. The researcher embarked research to establish whether the educators believed the training and support they received was effective.

Previous studies, local as well as abroad, indicate the importance of effective training and support for mainstream educators when it comes to the successful implementation of inclusive education.

Aspects the researcher attempted to highlight are pre-service and in-service training of educators.

A closer look is taken at classroom support, collaboration among all parties involved and peer support in order to get a clear understanding of what is needed, with special reference to the issue of support.

The researcher also took a closer look at the types of skills that are required for the successful implementation of inclusive education.

Data was collected through the administration of a questionnaire. The main findings revealed that the majority of educators believe that the training, support and skills they received from the Western Cape Education Department were effective.

These results were interesting, given the fact that most educators, both locally and abroad, still raise concerns about training and support.

Some key focus areas the researcher identified for the successful implementation of inclusive education are the integration of pre-service and in-service training programmes, parental involvement and collaboration between special and mainstream schools.

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- Thanks to God Almighty for giving me the strength, perseverance and courage to complete this enriching task.

## DECLARATION

I declare that *Educator training and support for inclusive education* is my own work and that it has not been submitted before in its entirety or in part for any degree or examination at any university and that all the sources I have quoted have been acknowledged in the references.

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Sean Christian September

16 April 2008

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## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.0 Introduction**

Like many new approaches, the introduction of inclusive education in South African schools will necessarily bring with it major challenges to all those involved. Successful implementation of this new concept will depend on a number of factors of which training and support to educators will play an important part.

#### **1.1 Motivation for the study.**

The predominant objective of an education system is one of providing quality education for all learners in order to enable them to realise their full potential and thereby meaningfully contribute to and participate in society. The recognition that education is a fundamental right and therefore needs to be freely available to all learners underpins the notion that the education system should provide for and sustain such learning for all learners (RSA Constitution, Act 108 of 1996, sec. 29:1).

The recent move towards inclusive education promotes a single system of education dedicated to ensuring that all learners are empowered to become caring and competent citizens in an inclusive and diverse society (Engelbrecht, 1999, p.6).

Thomson (1998, p.10) emphasised that the effective implementation of inclusive education depends on high-quality professional preparation of teachers at pre- and in-service levels to equip them for and update their knowledge in meeting the needs of a diverse classroom population. Other major barriers that stand in the way of the successful implementation of inclusive education worldwide are large classes, negative attitudes towards disability, examination-oriented education systems, lack of support services, rigid teaching methods, assessment dominated by a medical model, lack of parent involvement and a lack of clear national policies. A recurring theme throughout literature on learning support is that of effective teamwork among all role players. It seems that most of the

barriers in implementing inclusion are embedded in the emotional predisposition of educators.

Of equal importance to the development of teachers' skills and competencies in the success of the notion of inclusion is the need for teachers to develop positive attitudes toward children with disabilities (Chow & Winzer, 1992; Westwood, 1982). People with disabilities have been described as operating within three social circles; the inner circle of relatives, friends and peers; the central circle of rehabilitation professionals (which include teachers) and the outer circle of the general public (Antonak & Livneh, 1988). The role of the teacher is to mediate between the child with the disability and members of these other social circles. Studies of teachers' attitudes towards inclusive education have suggested that attitudes are strongly influenced by the nature of learners' disabilities and that the teachers are positive about including those learners whose disabling characteristics do not require extra instructional or management skills on the part of the teacher (Avramidis, Bayliss, & Burden, 2000; Soodak, Podell, & Lehman, 1998). It has been suggested that a key element in the effectiveness of inclusion must be the views of the personnel who have the major responsibility for implementing it – that is, teachers (Forlin, Douglas & Hattie, 1996).

A comparison of three studies done in Gauteng and the Western Cape to determine teacher attitudes towards inclusion (Swart, Pettipher, Engelbrecht, Eloff, Oswald, Ackerman & Prozesky, 2000 in Hay, Smit, & Paulsen, 2001, p.214), indicated the following patterns:

- Inadequate knowledge, skills and training of teachers to implement inclusive education effectively;
- Lack of educational and teacher support;
- Inadequate provision of facilities, infrastructure and assistive devices; and

- Potential effects of inclusive education on learners with special educational needs as well as other learners in the mainstream.

Research from both the UK and the USA into those conditions which are seen as essential to the promotion of inclusive schooling, almost invariably identify the role of the teaching assistant (learning support assistants in the UK) as critical (Florian & Rouse, 2001; Fox, 2001; Giangreco, 1997; Rose, 2000; 2001; Thomas, Walker & Webb, 1998). Successful inclusion requires that personnel from general and special education collaborate as team members.

The capacity for collaboration is enhanced when personnel from both systems receive preparation and support in order to understand each other's backgrounds and perspectives (Basset & Smith, 1996; King – Sears, 1995; Villa, 1996).

## **1.2 Statement of the problem**

The demand to educate learners with disabilities in inclusive educational settings continues to grow. The rationale for inclusive education is multifaceted and stems from legislative, ethical and empirical domains (Cole, Mills, Dale, & Jenkins, 1991; Individuals with Disabilities Education Act, 1997; Peck, Donaldson, & Pezzoli, 1990; UNESCO, 1994). However, many barriers to inclusion still exist in current educational service delivery models (Ainscow, 1997; Barton, Ballard, & Fulcher, 1992; Campbell & Fyve, 1995; Miller & Savage, 1995; Peck, Odom, & Bricker, 1993; Sindelar, 1995). A lack of personnel prepared to provide quality inclusive services to students with disabilities and their families is one of the primary barriers to serving students in the least restrictive, most inclusive environments (Evans, Townsend, Duchnowski, & Hocutt, 1996; King – Sears, 1995; Pugach & Seidl, 1995; Sindelar, 1995).

Research data further indicates that, apart from learners with behavioural or emotional difficulties,

it is especially the acceptance of learners with intellectual disabilities that raises the most sensitive issues for teachers and provokes most disagreement about the wisdom of inclusive education (Avramidis, Bayliss & Burden, 2000; Scruggs & Mastroiери, 1996; Soodak, Podell & Lehman, 1998; Wilczenski, 1993; Winzer, 1998). Soodak et al. (1998) found that teachers have negative views regarding the inclusion of learners with intellectual and learning disabilities as well as behaviour disorders and that learners with intellectual disabilities evoke feelings of anxiety in teachers.

Teachers are the key role-players in determining the quality of any new education policy (which includes the new policy of inclusion) (Fullan, 1993, p.127). Too often change in education has failed because insufficient attention has been paid to current practices and needs of those who are expected to put it into effect (Wearmouth, Edwards & Richmond, 2000, p.36). It appears that some schools are returning to systems of ability grouping that were found to be largely ineffective years ago.

The research problem for this study was conceptualized as follows:

- 1.2.1 Was the training provided effective, in order for the educators to cope with the demands that were placed on them?
- 1.2.2 Are the educators receiving sustainable effective levels of support for the challenges facing them on a daily basis i.e. in the implementation of the policy of inclusive education?
- 1.2.3 Do the educators' opinions differ with regard to the value of the skills they were taught?
- 1.2.4 Do educators, in general, believe that the training, support and skills were effective?
- 1.2.5 Do educators differ with regard to gender, location and rank with reference to their opinion about training received, support provided, skills acquired and effective continuous support from the Department of Education?
- 1.2.6 Is there any correlation between the years of teaching experience and the opinion of teachers

with regard to training, support and skills?

In addition this study will attempt to highlight the readiness of teachers for the effective implementation of inclusive education in the Western Cape. It is also envisaged that areas of improvement will be identified and the possibility of new areas of training and empowerment opened up.

### **1.3 Aims of the study**

The aims of this research are as follows:

1.3.1 To measure the effectiveness of training received from the Western Cape Education Department;

1.3.2 To measure the quality of support received from the Western Cape Education Department;

1.3.3 To determine whether the educators are of the opinion that the skills they acquired were effective.

1.3.4 To determine whether the educators are of the general opinion that the training, support and skills were effective;

1.3.5 To determine whether there are differences in the educators' opinions on the basis of gender, location and rank;

1.3.6 To determine whether there is any correlation between the years of teaching experience of educators and their rating of the dependent variables.

### **1.4 Research assumptions and hypotheses**

In an attempt to provide evidence in support of the research aims the researcher will gauge the opinions of educators on four dependent variables, namely training, support, skills and general. The researcher is therefore forced to develop a combination of research assumptions and hypotheses in order to get supporting evidence for the research aims. The research assumptions will relate to research aims 1,2,3 and 4, because it will not be possible to conduct a statistical test for these

opinion-based responses of the educators. The two hypotheses will be based on research aims 5 and 6. The researcher will conduct a Mann Whitney U-test, Kruskal-Wallis test and a Spearman rank correlation. The research assumptions and hypotheses are as follows:

1.4.1 The training provided to educators was effective for the successful implementation of inclusive education (Research assumption 1);

1.4.2 The educators believe that the levels of support they received from the Department of Education were effective (Research assumption 2);

1.4.3 The educators who participated in this study believe that the skills they acquired were effective for the successful implementation of inclusive education (Research assumption 3);

1.4.4 The educators believe in general that the training, support and skills they received were effective (Research assumption 4);

1.4.5 The educators' gender, location and rank influence their responses in differing degrees (Hypotheses 1);

1.4.6 There is no correlation between years of teaching and the rating of educators on the dependent variables of training, support and skills (Hypotheses2).

## **1.5 Definition of key terms**

### **1.5.1 Inclusive educational setting**

The term shall mean an integrated school environment where the learner with special needs receive tuition alongside his/her non-disabled peers. The whole school system is modified to meet the needs of the special learner.

### **1.5.2 Effectiveness of training and supporting**

This refers to the quality and relevance of training and support that was provided to mainstream educators.

### **1.5.3 Mainstream educators/teachers**

All educators who form part of the mainstream education system, who may or may not have

received pre-service training in special education. In this study the terms educator and teacher will be used interchangeably.

#### **1.5.4 Ex Model-C schools**

These were schools which, under the Apartheid government in South Africa, consisted entirely of white educators and learners. They received much greater pro-rata funding than schools for other population groups, which placed them in a much more advantageous position in terms of resources.

## **6. Methodology**

### **1.6.1 Research Design**

The research design is descriptive as it will use words as data in order to describe the process, convey the meaning and develop an in depth understanding of the constructed realities and observed worlds of both participants and researcher.

### **1.6.2 Sample**

The sample consisted of teachers from three schools. Every teacher involved in this study received training and support and attended workshops on inclusive education from the Department of Education prior to this study.

### **1.6.3 Instruments**

The researcher administered a questionnaire which was disseminated to all research participants for completion. The researcher conducted the investigation on the spot under natural conditions (Huysamen, 1994). As in previous studies on the topic (Hall & Engelbrecht, 1999; Hay, Smit & Paulsen, 2001), the researcher made use of the mentioned method of data collection in respect of each of the research aims.

An ideal questionnaire possesses the same properties as a good law. It is clear, unambiguous and uniformly workable. Its design must minimize potential errors from respondents and coders (Cohen & Manion, 1985).

With the qualities mentioned above in mind, the researcher decided on a self-administered, structured questionnaire, because it was assumed that this form of measurement instrument would

be more likely to yield the type of rich data that was sought (Hay et al., 2001; Bishop & Jones, 2002; Engelbrecht et al., 2003).

#### **1.6.4 Procedure**

After obtaining permission from the Western Cape Education Department as well as from the relevant principals, schools were visited with a view to collecting data. The research approach was a combination of quantitative methods to allow for a wide range of research techniques.

#### **1.7 Reliability and Validity of the instrument**

The research instrument that was used was developed by the researcher and therefore it was being used for the first time. In order to ensure a level of reliability, the researcher performed a Cronbach's Alpha coefficient. In order to test the accuracy of the scores, a questionnaire was administered to a group of educators. The same group of educators was followed up later and for each individual in the group a specific criterion measurement was obtained and the correlation between scores and criterion measurements was calculated. The higher this correlation, the better the efficiency of the test was as the predictor of the given criterion.

#### **1.8 Summary**

This chapter pointed out the need for a study on inclusion in schools in the Western Cape and the value of the research for future educational activities on inclusive education. The effectiveness of the training and support that was provided to educators in schools in the Western Cape was emphasized in this chapter. This chapter defined the problem, aims, hypotheses, key terms, methodology and research plan of the study.

The following chapter focusses on the reviewed literature on inclusive education and in particular studies of the relationship between training, support, skills and inclusion.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter will focus on the most important components which are required for the successful implementation of inclusive education, namely training, support and skills. Building their skills, knowledge and self-confidence through proper training, educators may realise that not only can they identify and handle learners with behaviour problems, but they can also help those learners to change their behaviour. This study therefore will highlight the important contribution teachers could make towards the successful implementation of inclusive education.

Globally, approximately 80% of children with disabilities live in developing countries with poor health care and educational systems. Less than 2% of these learners receive any type of special services (Hegarty, 1992). Industrialized societies not only provide services for special needs learners, but also make significant advances to bring these learners into the mainstream of regular education (Murray-Seegert, 1992). The statements made by Hagarty and Murry-Seegert emphasise the need to explore this "barren" territory in South Africa, a developing country.

Educators' emotional disposition and attitudes in mainstream schools, together with their training and skills, have practical implications for learners who are experiencing barriers to learning. Factors such as the number of learners in a class and the academic pressure and standards of the school influence the amount of time and attention an educator can afford a learner who is experiencing barriers to learning in the mainstream school (Hall & Engelbrecht, 1999, p.231). High demands are therefore placed on educators. Educators place more pressure on themselves as they have high expectations of the way they attend to these learners' demands. This creates a lot of uncertainty in the minds of educators which, in turn, has a serious, negative impact on the successful implementation of inclusive education.

It appears that the empowerment of educators is neglected in the South African policy document on inclusive education. If the implementation of changed policies fails in a so-called developed country such as Britain where educators are generally adequately trained (Wearmouth, Edwards & Richmond, 2000) this could also be true of South Africa where a large percentage of educators are insufficiently trained. Mittler (1994) stated that inclusive education is not simply integration or main streaming, but requires radical school reform, changing the existing system and rethinking the entire curriculum of the school in order to meet the needs of all children. Lipsky and Gartner (1996) identify the following seven factors as being crucial to the successful implementation of inclusive education:

- visionary leadership;
- collaboration between everyone involved;
- refocused use of assessment;
- support for staff and students;
- appropriate funding levels;
- parental involvement;
- effective programme models, curriculum adaptations and instructional practices.

This chapter therefore will focus on the cornerstones of the successful implementation of inclusive education.

## **2.2 Studies on the type and effectiveness of training**

Various studies on inclusive education, as will be outlined below, have pointed out the important role well-trained educators play in the successful implementation of inclusive education.

The necessity of training the educators to think and work in a new frame of reference places the focus on perhaps the single greatest problem facing the new education dispensation:

- A disturbing number of educators in South Africa are confused and insecure because of a series of radical changes that have transformed their working environment;
- They are not acquainted with the principles of outcome-based education;
- they find it difficult to seek and find their own learning material (relevant to each child's culture, interest and level of development);
- they struggle to involve parents and communities in the learning process;
- they feel inadequate to deal with so much diversity amongst the large number of learners in their classrooms;
- and they suffer a lack of self-respect and self-assurance because of labels of laziness and untrustworthiness that are attached to them (Sethosa, 2001; Weeks 2000).

Another question would also be to what extent the emphasis should be in terms of the different types of training, i.e. pre-service training and in-service training. Some researchers are of the opinion that positive attitudes and thoughts will be possible through relevant pre-service training. Engelbrecht and Forlin (1998; pp. 8-9) express the hope that pre-service training of teachers will be developed around a philosophy that incorporates a clear vision of inclusion and promotes the acceptance of all learners, regardless of ability. Thomson (1998; p10) emphasised that the effective implementation of inclusive education depends on high-quality professional preparation of teachers at pre- and in-service levels to equip them for and update their knowledge for meeting the needs of a diverse classroom population. According to Prinsloo (2001, p.347) it is of utmost importance that educators at a pre-service and in-service level, should be prepared and empowered to assist mildly intellectually disabled (MID) learners to develop their potential optimally.

Garner (1996, 2000) was concerned that inclusion would falter unless a significant change was made to the current structure and content of initial teacher training. He also argues that the most successful training is likely to occur in school teams who have had some experience of working with learners with Special Educational Needs (SEN) and who can thereby focus upon these learners when undertaking training.

Evans, Lunt, Wedell and Dyson (1999, p.159) are of the opinion that the scope for individual schools and the educators within them to meet the diversity of their learners' needs, broadly depends on three main factors:

- flexibility of response allowed by the organisational and curricular structures of the education system in which the school operates;
- the level of knowledge, skills and understanding to which educators are trained and the scope given to teachers to use their abilities to meet the individual learner's learning and personal needs;
- the level of resources the society in a particular country is willing to allocate to the education of its children and young people.

Since educators are the key role players in assuring the success of any new education policy, the researcher is obliged to question the readiness of the training system for educators in South Africa. According to Robertson (1999, p.170) the history of Special Educational Needs (SEN) training generally – within initial training and continuing professional development programmes – has, for many years, been the subject of almost eloquent negligence by policy makers. Research by various authors has shown the emphasis on responsibilities when it comes to the inclusion of learners with SEN. This in itself is not inappropriate, but what is entirely lacking is any guidance about underlying and practical issues of pedagogy that students both want and need to know about. From a special educator's point of view, it appears that inclusive education highlights a vacuum in the training of mainstream school educators, which will have to be filled with compulsory training in special education (Hall & Engelbrecht, 1999).

A lot of research has been done by education departments, teacher training colleges and universities in South Africa to develop programmes and models directed at teachers in order to equip them with knowledge and skills needed for the successful implementation of inclusive education. According to Prinsloo (2001), the University of South Africa and the University of Pretoria developed three models, to motivate and empower teachers with the main focus on teachers in service. These models are:

- A model for teachers to assist learners with behaviour problems in the classroom;
- An At Risk Disk as instrument to enable teachers to identify the nature and extent of the learning difficulties of learners with intellectual difficulties;
- A manual to train teachers to assist mildly intellectually disabled learners in the foundation phase.

There is much endeavour in South African educational circles to train and re-train educators to accommodate a wide spectrum of diversity in the inclusive classrooms. The success of the policy of inclusion and of outcomes-based education will depend on the motivation and diligence with which each section of the educational structure makes use of the instruments that are available to empower teachers (Prinsloo 2001, p.348).

While there appears a need for better training of regular educators (Elkins, 1994; Mittler, 1992), researchers have varied opinions about where the emphasis should be placed with some recommending pre-service training (Glomb & Morgan, 1991; Guralnick, 1991; Ringlaben & Price, 1981) and others recommending in-service training (Marozas & May, 1988).

### **2.2.1 Pre-service training**

The emotional needs of the educator are most important and have to be addressed before knowledge and skills are addressed on a cognitive level (Shechtman & Or, 1996, p.146). This sentiment is echoed by most researchers who are of the opinion that the effectiveness of inclusion will be determined by a high standard of cognitive and emotional support for educators and learners in mainstream schools. Prinsloo (2001) argues that at the end of the training period of a teacher, he/she should experience a paradigm shift with regard to mildly intellectually disabled (MID) learners: instead of expecting limited success, their attitude towards these learners should change to the extent that they believe in the ability of these learners despite their problems.

Hall and Engelbrecht (1999) argue that the following needs of educators must be addressed after the emotional needs have been dealt with:

- information on the motive for the change to inclusive education and the practical implementation involved;
- information on the possible role of special schools in future;
- a vision, mission and plan of action for the implementation of inclusion;
- in-service training that focuses on the learner-centred nature of academic, social and emotional support programmes for learners who are experiencing barriers to learning in mainstream schools;
- teaching strategies based on the individual's total level of functioning;
- training on collaboration and teamwork;
- information and support to bring about a new education paradigm;
- information pertaining to practical considerations in distributing certain resources; and
- insight into the financial support to schools.

Research already done on inclusive education has revealed that relevant pre-service training can go a long way in shaping positive attitudes towards learners with special needs.

### **2.2.2 In-service training**

Mainstream educators are rarely equipped, skilled or qualified to deal with the diversity of learners who are experiencing barriers to learning in large classes (Bradley, King-Sears & Tessier-Switlick, 1997:75; Schoeman, 1997, p.3). Hay, Smit and Paulsen (2001) argue that many educators feel unprepared and ill-equipped to teach integrated classes and ascribed this to a lack of training, lack of time, large classes, lack of facilities and lack of teacher experience. They indicated that they were willing to learn more about these issues, provided that it led to a diploma or certificate.

These statements emphasise the importance of sufficient training for those educators who are already in the education system on how to deal effectively with learners who encounter barriers to learning.

Hall and Engelbrecht (1999) state that tertiary institutions need to become more involved in educational practices. Participation of tertiary institutions in schools include involvement in classroom research, support for educators and learners as well as in-service training. The success of implementing inclusive education will therefore largely depend on the efforts that are being put into the training for teachers to allow them to develop their skills.

### **2.3 Studies on the quality of support and inclusion**

This section forms the theoretical basis of the second aim of this study that deals with the necessity for quality support for teachers which is needed to ensure the success of inclusive education. The challenges in the South African education system are very unique as far as support and training are concerned. Some schools might have enjoyed privileged training and support in the past while others had to be satisfied with little to none. These factors suggest that all stakeholders (Education Department, schools, parents and non-governmental organisations), should support each other in order to ensure a quality educational system in South Africa. The researcher will now attempt to highlight the key issues of successful support.

If educator preparedness can be identified as a critical factor in the movement towards inclusion, it is essential that those who are involved in teacher education, (both pre-and post-qualification and others who have a responsibility for educational legislation), support teachers in gaining confidence in addressing Special Educational Needs. Educators need greater understanding of the conditions which must be created in order to enhance the successful inclusion within mainstream schools (Rose, 2001). This statement forms the basis upon which the importance of sufficient support will be dealt with. The researcher is also of the opinion that quality training and support is crucial in determining the successful implementation of inclusive education. Emotional support should never be neglected, especially for those teachers who have been teaching for a long period of time.

Hall and Engelbrecht (1999) argue that the educator's need for support is related to the need to share

information, experiences and problems with others in similar circumstances and that the following needs must be addressed:

- Support of and collaboration between mainstream and special school educators, whether in teams or in consultation;
- mutual respect for a colleague's experience and expertise in various areas;
- strategies for collaboration, skills for consultation and team-work, as well as sharing skills in the development of learning support strategies;
- a spirit of collaboration and a shared responsibility for learners;
- collaboration with parents regarding the learner's progress, participation in decisions and information on educational issues;
- community involvement to improve attitudes towards diversity and preconceived ideas about people with disabilities;
- improved job opportunities and participation in society for all, irrespective of barriers to learning;
- greater participation of tertiary institutions in education practices through involvement in classroom research, support to educators and learners, as well as in-service training and personnel development; and
- greater utilisation of existing special schools as centres where learners, parents, educators and other interested persons can get advice and support.

There is a possibility that some people might resist these suggestions mentioned above. Resistance has the potential for posing a serious challenge to the development of a culture of learning which is essential to the successful implementation of inclusive education. The extension of services of the current educational structures is one way to deal with the needs of teachers.

Inclusive practices per se do not necessarily lead to equality or inequality if educators are not supportive of the implementation of this pedagogical change. The statement mentioned above is echoed by Kavale and Forness (2000), who suggested, "a solution that simply calls for full inclusion without accompanying empirical support is neither logical nor rational" (p.289).

### **2.3.1 Classroom support**

From the early days of mainstreaming, general education teachers expressed some negative attitudes, especially feelings of inadequacy in dealing with special education students (Ringlaben & Price, 1981). Larrivee and Cook (1979) identified three factors underlying teacher attitudes about integration:

- academic concerns regarding the possible negative educational consequences of segregating learners with disabilities;
- administrative concerns and issues of support; and
- pedagogical concerns and issues about the training and experience necessary to educate

learners with disabilities.

Scruggs and Mastropieri (1996) found similar concerns in a meta-analysis of 28 investigations surveying the perceptions of some 10000 general education educators regarding inclusion. A majority supported the concept of integration, but a far smaller number expressed a willingness to include learners with disabilities in their own classrooms. There was also an expressed belief that the general education classroom was neither the optimal placement nor one that would produce greater benefits than other placements. A good proportion also believed that they did not have sufficient classroom time for inclusion efforts, that they were not prepared to teach learners with disabilities and that they might not receive the support necessary for inclusion efforts. The findings were interpreted as support for the assumption that educators viewed learners with disabilities in the context of the reality of the general education classroom rather than as support for the prevailing attitudes about integration (Kavale, 2000).

The manifestation of these attitudes are seen in findings showing that the requisite individual planning for learners with disabilities may not occur in general education contexts (Schumm & Vaughn, 1995). Although instructional adaptations were viewed as desirable, they may not be used unless perceived as being easy to implement as well as requiring little extra time, little change in routine or little additional assistance. When general and special education teachers did work collaboratively in inclusive settings, there tended to be tensions stemming from differences in perceived roles, teaching styles and philosophical orientations (Thomas, Walker & Webb, 1997).

In South Africa we had an education system that was content-based, inflexible, oppressive and segregated in terms of disability and race. It was determined by time and calendar and by failing and passing at the end of the year. A shift is now taking place towards a new, liberating system of education that is outcomes-based, inclusive in terms of disability and race and has a flexible approach to time and progression (Naicker, 1999).

**Table 1: Old and new paradigms**

<b>OLD PARADIGM (old curriculum &amp; special education)</b>	<b>NEW PARADIGM (new curriculum &amp; inclusive education)</b>
Content-based	Outcomes-based
Focuses on knowledge (memorising, rote learning, recall and memory).	Focuses on knowledge (conceptual understanding and comprehension), skills and attitudes.
Curriculum, instruction and assessment are inflexible.	Curriculum, instruction and assessment are flexible.
Time is fixed.	Time is flexible
Standards are norm-referenced.	Learners get credit for what they do.
Permanently grades students.	Defines students at their highest level.
Assessment focuses on the end product of learning.	Assessment focuses on both the process and end product of learning.
Learning breakdown is caused by individual deficit.	Learning breakdown is understood by locating an individual within the system and understanding the barriers to learning that learners may be confronted with.
Clock, schedule and calendar organise education system.	Time is not fixed.
Discrete subjects such as maths, economics, history	Integrated learning areas such as Life Orientation, Arts and Culture, Natural Sciences, Human and Social Sciences
Sexist, racist and disablist thinking	Non-sexist, non-racist, non-disablist
One learning modality is focussed on.	Several learning modalities are acknowledge.

Adapted from *Curriculum 2005- A space for all* by Naicker (1999, p.95)

Because the classroom is the place where the learners will receive their first level of support and probably most of their support the responsibilities educators carry increase and inevitably their stress levels, as well.

An international review of literature on educator stress reported by Chen and Miller (1997), also highlighted issues that increase educators' stress levels. Organizational issues such as time constraints, workload, role conflict, role ambiguity and administrative bureaucracy, were all cited as

stressful. Stressful classroom issues include a lack of resources, class size and student discipline. In addition younger and less experienced teachers reported greater stress. Wisniewski and Gargiulo (1997), identifying four major areas of stress, undertook a further critique of existing literature that focused on special education teachers. Organizational issues included various workload problems that related to insufficient planning time and the excessive amount of time necessary to prepare for individual learner's needs, demands for accountability and excessive paperwork. Professional interactions with school personnel, parents and regular class teachers when endeavouring to bring about inclusion were all sources of stress. A lack of appropriate professional training was the third area cited. This was particularly related to teachers being required to implement new practices with inadequate ongoing training and without necessary organizational resources. Difficulties in meeting the needs of an increasingly diverse special education population were also a source of stress (Forlin, 2001).

In relation to classroom support, Giangreco (1997) emphasised the importance of collaborative planning between educators and support staff. Early intervention, support and sharing of knowledge can only be done successfully when collaborative structures are in place (Lipsky & Gartner, 1997, p.101; Giangreco, Dennis, Cloninger, Edelman & Schattman, 1993, p.367).

According to Hall and Engelbrecht (1999) sufficient emotional and cognitive support of learners and educators in the mainstream school will determine the effectiveness of inclusion. Special school educators are encouraged to share knowledge with mainstream school educators who may otherwise not have access to this knowledge. Despite existing skills and knowledge of both mainstream and special school educators, personnel do not have the necessary collaborative skills to share their expertise effectively. The historic division between mainstream and special schools also hampers effective collaboration.

Successful inclusion requires that personnel from general and special education collaborate as team members. The capacity for collaboration is enhanced when personnel from both systems receive preparation and support in order to understand each other's backgrounds and perspectives (Bassett & Smith, King-Sears, 1995; Villa, 1996). Numerous studies have proven the importance of collaboration in order to combat various types of barriers towards the successful implementation of inclusive education. The next section will attempt to broaden the issues around collaboration.

### **2.3.2 Professional collaboration as a means of support**

A higher degree of collaboration between therapists, teachers and learning support staff was recognised to be essential for the development of the curriculum and to support children's individual educational plans (IEPs). The rapid change in school population demanded a high priority for training involving all staff (school and health authority). Teachers and learning support staff traditionally viewed training as taking place in isolation from children (attending either outside courses or school-based INSET) and children's needs were usually supported by external agencies

working in isolation from school staff (Chapman & Ware, 1999).

As more learners who are experiencing barriers to learning are accommodated in mainstream classrooms, educators have to find ways of providing efficient learning support. Special school educators can support mainstream educators by providing a continuum of services (Hall, Campher, Smit, Oswald & Engelbrecht, 1999, p.165):

- Early identification of barriers to learning and development as well as learning support programmes.
- Study methods, life-skills, social skills and behaviour modification programmes are other available skills and strategies that need to be shared to improve a learner's self-esteem.
- Assessment of academic progress of at-risk learners as well as mainstream school learners.
- Language programmes for literacy and for second language users.
- Sign language and interpreters.
- Preparation and support of learners for return to mainstream schools and classes; and
- Follow-up work after placement in mainstream schools.

Special school staff need to link up with various members of the community in order to provide information and support. Educator support teams at mainstream schools, consisting of medical doctors, social workers, paramedics, special educators and mainstream educators, are structures that can accommodate effective collaboration with special school personnel (Department of Education, 1997).

Special education is not a site or setting, but a service that is responsive to the unique needs of each learner. The educational community increasingly advocates a more inclusive public education system for all learners. It is imperative that educators and learners are supported sufficiently during the transformation of education for learners who are experiencing barriers to learning. Support programmes have to be implemented to address the emotional and cognitive needs of all educators.

Schools for specialised education should not be seen as a separate entity but should act as resource units. It would therefore be necessary for each region or district to have such a school or unit to provide *inter alia*.

- Planning and co-ordination for specialised education where applicable;
- Support for mainstream educators in the development of the curriculum to ensure that the diverse needs of learners in the mainstream are addressed;
- In-service training for professionals and para-professionals;
- Guidance and counselling for parents and caregivers;
- Assessment of barriers to learning;
- Specialised support, i.e. therapists, psychologists; and
- Local public awareness and education (Hall & Engelbrecht, 1999).

### **2.3.3 Peer support**

The role learners have to play in determining the successful implementation of inclusive education dare not to be underestimated. There should also be a mutual understanding and acceptance among themselves.

There are a number of significant arguments for the use of co-operative learning strategies and these need to be considered in all schools which have increased inclusion as an aim. Social exchanges encouraged through group work can be a powerful learning tool. Psychologists such as Bruner (1972) and Vygotsky (1978), believed that a pupil's potential for learning is revealed and often realised in interactions with more knowledgeable others, such as a teacher or peer group. Thus co-operatively achieved success lies at the foundation of learning and development. Group work creates opportunities for pupils to formulate and share their ideas through talk and that encourages mutual support in a safe environment which, in turn, can lead to personal success and raised self-esteem.

Hart (1992) suggests the support process which develops within successful groups can become self-sustaining thus allowing the educator more time to address the needs of individual learners. Well-managed group work also provides essential opportunities for pupils to develop, practise and generalise their social skills. If much of their experience at school is restricted to a one-to-one educator-learner relationship they may be denied this chance.

## **2.4 Studies on the relationship between type of skills required and inclusion**

An analysis of teaching approaches and learning styles is an essential process for the educator who wishes to develop an inclusive classroom. However, the development of an analytical approach is a complex area and one which has recently been the subject of both research and controversy. The effective use of all resources, human and material, requires arrangements which take full account of the needs of the learner, the teaching environment and the learning activities planned.

This research will therefore attempt to put into perspective specific skills needed for the successful implementation of inclusive education. A closer look will now be taken at some of the literature which is available on the issue of skills. The researcher will in his attempt to examine different teaching styles, differentiate between whole class, small-group, paired and individual teaching. The relevance and relative merits of each will be explored and strategies for their use with learners with learning disabilities described. Any move towards inclusion will require that educators are fully conversant with an appropriate range of teaching strategies and learning styles and that they will have the ability to apply these in order to ensure effective access for all learners.

The use of individual teaching sessions has been a commonly used strategy in the education of learners with learning difficulties. It has been argued that, for learners who experience difficulties, there is a need to provide moments of intense concentration with an adult if they are to learn effectively (Hammond & Read, 1992). The relatively small numbers in classes in special schools has led to the popularisation of this approach, but classes which may have thirty or more learners in a mainstream school make this difficult to organise, and in some instances to justify (Alexander, 1992; Moyles, 1992). Working with individual learners should enable educators to match their teaching as accurately as possible to each learner's needs. Organising the classroom to facilitate individual teaching usually involves more than one adult, although it can be managed very successfully in mainstream classes where learners have been taught to work independently, supporting each other when the educator is engaged with individuals (Ainscow & Tweddle, 1988; Westwood, 1997). If there is more than one adult, one can have the role of teaching individuals or a small group while the other teaches the rest of the class (Wolfendale, 1992). This can be very effective if well planned in advance.

Working in small groups was not only more widely explored, but recognised as beneficial to learning and a highly effective way of promoting inclusive classrooms (Ainscow, 1995). Galton and Williamson (1992) classify the range of small groups commonly developed in classrooms as follows:

- seating groups, where learners sit together but are engaged in separate tasks and produce separate and often quite different outcomes;
- working groups, where learners tackle similar tasks resulting in similar outcomes but their work is independent;
- co-operative groups, where learners have separate but related tasks resulting in a joint outcome;
- collaborative groups, where learners have the same task and work together towards a joint outcome.

Each grouping has its strengths and weaknesses and can be used for different purposes. Mounting evidence from research, both in the UK (Bennet & Cass, 1988; DES, 1989; Lewis, 1991; 1995a) and the USA (Johnson & Johnson, 1982; Slavin, 1983; Thousand & Villa, 1991), has led writers to conclude that where opportunities to work together are provided all pupils can and do effectively learn as members of a group. Research suggests that well-organised group work has benefits for all learners, and can be a powerful tool for the development of inclusive practice. Grouping learners together in pairs can provide an initial step towards the successful development of group work. There are several ways in which paired work can be organised and much will depend of the nature on the task at hand and the needs of the learners. The teaming of skilled pupils with those whose needs are greater is one method which affords teachers the opportunity to utilise the benefits of difference: for example, different ability, different knowledge, different age (McNamara & Moreton, 1997).

Research on pairs and groups has shown that in order to encourage positive attitudes, to raise self-esteem and create effective learning, all learners should be encouraged to take on the role of “instructor” or “organiser” (McConkey & McCormack, 1984;

Wade & Moore, 1994). Exploration in the area of paired work has been extensive (Topping, 1988; Hornby et al., 1997) and it provides clear evidence of success when promoting interaction between learners of all abilities and need.

It is possible to organise a variety of co-operative groups with a bewildering array of names such as buzz, snowball, carousel, rainbow and envoying (Cowie & Rudduck, 1988; Byers & Rose, 1996; McNamara & Moreton, 1997). The most appropriate group method to use will depend on the intended outcome of the lesson, the needs of the individuals involved and the available resources, particularly in terms of adult support. To achieve success the educator must ensure that:

- every learner is actively involved;
- their work is valued as an important part of the whole;
- they are aware of the purpose of the activity and the intended outcome.

Most learners with learning difficulties can be enabled to learn through whole class teaching, especially if it reinforces and builds upon the skills and knowledge addressed in the individual sessions. Whole class teaching can be used in a variety of different ways. There are times when it is used for drill and rote learning or for story time, choral singing or for introducing a new topic (Moyles, 1992; Pollard & Tann, 1993). Perrot (1982) suggests that educators have to work hard at learning how to use questioning to provoke learning. Research has shown that the majority of questions only require learners to recall data. Where questioning does offer the opportunity to explain, explore and reflect on knowledge educators do not always wait long enough for a reply. Valuable contributions are lost as the educator moves on (Watson, 1996).

Kerry (1982) provides some guidance to help educators build up skills in sequencing questioning: moving from demanding recall of data, naming and showing comprehension towards requiring learners to hypothesise, analyse, evaluate and problem-solve. Targeting specific questions at individual learners, whilst being sensitive to issues of learner confidence, is another way of ensuring everyone feels included in the session. This may involve teaching the whole class to respect the opinions of classmates and providing rules to prevent the interruption or derision of contributors. There are times when educators can allow learners to take the lead in whole class interactive teaching.

Lazarus, Daniels and Engelbrecht et al. (1999) emphasises the development of personal skills in order to build the health-promoting school. Staff development, parent development and life-skills education for learners will follow.

The researcher emphasises the importance of clear guidelines for the practical implementation of inclusive practices.

## **2.5 Summary**

Through this chapter the researcher attempted to place the emphasis on the minimum requirements needed for the successful implementation of inclusive education in South African schools with special attention to training, support and skills. It also elaborates on collaborative decision making and planning in order to ensure the successful implementation of inclusive education.

The next chapter deals with the research design and methodology which was followed in this study. The research design, method of sampling and the research instrument are defined. Administration procedures as well as the methods of data analysis are explained.

## CHAPTER 3

### RESEARCH DESIGN AND METHODOLOGY

#### 3.1 Introduction

The previous chapter was devoted to the major theoretical perspectives that led to the successful implementation of inclusive education. It dealt specifically with key issues such as training and support to those who play a critical role in implementing inclusive education, the educators.

According to Mouton (2001) there is a distinct difference between research design and research methodology. Research design focuses on the end product, i.e the kind of study being planned, while research methodology is concern with the research process, i.e the tools and procedures that will be utilised.

This chapter aims to help the reader to understand, in the broadest possible terms, the process of scientific enquiry. It will give the reader an idea of how the researcher intends to conduct the research with the research aims in mind.

This chapter presents the design and methodology of the study that was undertaken by the researcher. This chapter includes:

- Research design
- Participants and sampling procedures
- Collection of data and
- Analysis of data.

#### 3.2 Research design

Borg and Gall (1989) define research design as a process of creating an empirical test to support or refute a knowledge claim. The design for this study was encouraged by educators' beliefs and attitudes towards the training and support they receive from the Western Cape Education Department. The researcher intended to collect quantitative data using questionnaires. He statistically analyzed the data to describe trends about responses to questions and to test hypotheses. The research design of this study may therefore be described as a survey design.

in which the probability of the selection is unknown (Cohen & Manion, 1985). Although probability sampling is necessary to obtain a general opinion of the whole population, there are occasions when we do not need to go through the trouble and expense of obtaining such sampling. This includes a case where we have a specific group of people in mind (Sommer & Sommer, 1986, p.198).

In purposive sampling the researcher handpicks the cases to be included in his sample on the basis of his judgement of their typicality. In this way he builds up a sample that is satisfactory to his specific needs (Cohen & Manion, 1985). The choice of a purposive sample was dictated by the fact that the participants were from three pre-selected schools in the Western Cape. Selection of such a preferred sample is one in which individuals thought to be the most important or relevant to the issue being studied, are targeted for the research. This method has been employed by several researchers (Bothma, Gravett & Swart, 2000; Mukherjee, Lightfoot & Sloper, 2000; Hay, Smit & Paulsen, 2001; Bishop & Jones, 2000; Engelbrecht et al., 2003; Fielding-Barnsley, 2005).

A total of 57 educators were chosen to participate in the study: 20 from a suburban, ex-model C school, 14 from a township school and 23 from a coloured school which is situated in a suburban area. On the question of: "How would you classify your school?", in section A of the questionnaire, 3 educators from the coloured school classified their schools as being a rural school due to a lack of resources, a small budget, fifty percent of their learners are from the surrounding farms and the school is far from the local library. All these educators received training and support from the Department of Education previously. On the strength of the above-mentioned information it can be said that this was a non-probability, purposive sampling. This type of sampling method carries the advantage that it is less complicated and more economical, in terms of finance and time (Huysamen, 1998, p.44).

### **3.4 Research Instrument**

#### **3.4.1 The questionnaire**

An ideal questionnaire possesses the same properties as a good law: It is clear, unambiguous and uniformly workable. Its design must minimize potential errors from respondents and coders (Cohen & Manion, 1985).

With the qualities mentioned above in mind, the researcher decided on a self-administered, structured questionnaire (Appendix B), because it was assumed that this form of measuring instrument would be more likely to yield the type of rich data that was sought (Hay et al., 2001; Bishop & Jones, 2002; Engelbrecht et al., 2003).

The researcher is well aware that the completion of a questionnaire is a courtesy asked of the educators involved and hence it should be so constructed that the required data is obtained with the

minimum use of the respondent's time.

### 3.4.2 Questionnaire construction

The researcher decided on a Likert-type scale, where a set of statements is presented to each of which the subject has to respond in terms of one of the the following categories: *Highly effective, effective, somewhat effective, hardly effective, not effective*. Each of the categories was allotted weightings of 5,4,3,2,1 respectively (Behr, 1988).

The questionnaire developed by the researcher was divided into two parts. The first part focused on the background of the participants while the second part focused on the actual knowledge of the individual. The Likert-type response format required educators to make a tick alongside one of several options (Forlin, Douglas & Hattie, 1996; Tait & Purdie, 2000).

The research instrument administered in this research project was developed by the researcher and therefore used for the first time. In order to ensure a level of reliability, the researcher decided on performing a Cronbach's Alpha co-efficient, thereby providing for internal consistency of the 15 items in the Likert-type rating scale. The items on the training scale, support scale, skills scale and general scale revealed a high reliability co-efficient ranging from 0.801 to 0,0866. This high internal consistency is indicative of the fact that the items in the research instrument were well balanced.

Paying attention to the quality of the questions was one of the main priorities when the researcher selected an instrument. Using good questions helps participants feel that they understand the question and can provide meaningful answers. Good questions are clear and unambiguous and they do not confuse the participants. With the aforementioned in mind the researcher took great care in constructing the questions which were subject to the following criteria:

- The questions were clear, there were no vague or imprecise words;
- There were no multiple questions (so-called double-or triple-barreled questions were reduced to a single question).
- The questions were not wordy (unnecessary words were cut out to simplify and shorten the question).
- Caution was taken to avoid negative questions.
- Familiar words were used to avoid jargon.

- Overlapping responses were avoided.
- The researcher decided on single response options to avoid unbalanced response options.
- Mismatches between the questions and the answers were avoided.
- The language used in the questionnaire was kept as simple as possible.
- All questions were applicable to all participants (Creswell, 2003).

Mouton (2001, p.103) warns against fictitious constructs which occur when researchers measure constructs or attitudes that do not exist, e.g. asking people about matters of which they have no knowledge. The researcher was confident that the questionnaire under discussion adhered to every prerequisite as identified by experts in this field.

Questionnaires may be classified in two ways: according to the kind of questions set and according to who answers the questions about whom. Questions may be asked in a closed or an open form or both in combination. The closed question requires the respondent to place a tick, make a mark or draw a line alongside one of several possible answers. The open form of a question enables the respondent to reply as he likes and does not confine him to a single alternative. The closed form of questionnaire facilitates answering and makes it easier for the researcher to code and classify responses. This was particularly useful since details from a large number of questionnaires had to be dealt with necessitating the use of either mechanically sorted or computer input punched cards (Behr, 1988). Close-ended questions are ideal for collecting straightforward factual information such as particulars of the sex, age or the marital status of the respondent.

The researcher was aware of some limitations in each method used , but at the same time there are many benefits. The self-administered questionnaire had advantages and weaknesses. Some of the advantages were:

- the researcher could collect information from a fairly large number of people;
- it was inexpensive to collect the data – the researcher drove to the schools personally to drop off and collect the questionnaires;
- the respondent remained anonymous;
- the return rate of the completed questionnaire was high;
- it produced undisguised descriptive information; and

- all respondents were presented with the same questions (standardised questions)
- the researcher needed to take time to think about the purpose of the questionnaire and drafting of questions and piloting;
- the researcher needed to be careful to make questions clear and even tried to ensure that the responses were not superficial by balancing items. Added to this was the fact that it was more difficult to get explanations as set variables were collected (Mouton, 2001).

### **3.5 Procedures for administration of the research instrument and control of confounding variables**

After formally obtaining permission from the Western Cape Education Department (*Appendix A*), the researcher approached the principals of three schools and asked their permission to participate in this research study. The schools were Riverview Primary school, where 23 educators (6 male + 17 female) participated, PJB Cona Primary school, where 14 educators (all female) participated and Laerskool Worcester-Oos, where 20 educators (5 male + 15 female) participated in the study. The principals from all these schools volunteered to act as facilitators between the researcher and their respective staff members. Two of them also took part in this study. In this way the researcher would be reasonably sure of the prompt return of the completed questionnaires (Fielding-Barnsley, 2005).

Several steps were taken to ensure that the collected data could be analysed in a sensible manner, which is important in an empirical study:

- the researcher delivered the questionnaires at the schools in person during the last week of January 2008 and collected it in the second week of February 2008 in the same way;
- the principals of the three schools took responsibility for the completion and collection of the questionnaires.

This study had its benefits and limitations. The instrument (self-administered questionnaire) that was used in this study has advantages and disadvantages. Some of the advantages are:

- the researcher could collect information from a large number of people at any given time;
- it was fairly cheap to collect the data;
- it allowed the participants to stay anonymous;
- unlike the low return rates of postal questionnaires, the self-administered questionnaires had a high return rate;

- it was good at producing undisguised descriptive information;
- all respondents were provided with the same questions (standardised questions).

A few limitations of this method were:

- time was needed to think about the purpose of the questionnaire, drafting questions and piloting;
- caution was needed to make questions clear and even if it was clear the responses could be superficial- it was more difficult to arrive at explanations as set variables were collected.
- Bias may arise from the respondents misunderstanding of questions, resentment of interference in their personal affairs or falsification for reasons associated with the subject of the survey.

According to Cohen and Manion, (1995, p.101), two important processes need to be done before data analysis can take place i.e., editing and coding. Editing self-completed questionnaires is intended to identify and eliminate errors made by respondents. Moser and Karlton (1977) point to three central tasks in editing:

- completeness: a check is made that there is an answer to every question;
- accuracy: as far as is possible a check is made that all questions are answered accurately;
- uniformity: a check is made that interviewees have interpreted instructions and questions uniformly.

Coding refers to the reduction of data to a suitable format for analysis and entails assigning a code number to each answer of a questionnaire item. In this research coding was developed after the questionnaire had been administered and answered by respondents and therefore it is called post-coded answers. Coding was done with the assistance of the SPSS package in line with the research aims. The measuring instrument used in this study confirmed or validated the data gained through the literature review.

### **3.6 Scoring of the research instrument**

The 15 questions were arranged in such a way that the focus was kept on the research aims. The questionnaire was divided into 4 questions which focused on training (measuring research aim 1), 4

questions which focus on support (measuring research aim 2), 4 questions on skills and 3 general impression questions. Caution has been taken when selecting the items in order to allow respondents to feel comfortable to answer the questions honestly and without any fear.

Closed-ended questions in a checklist format were used during this research study and the participants were given 5 choices i.e., highly effective, effective, somewhat effective, hardly effective and not effective. These categories were converted to values 5, 4, 3, 2 and 1. The categories of highly effective and effective were combined together to form one category, namely effective. Simultaneously the categories not effective and hardly effective were combined to form the not effective category. The somewhat effective category remained unchanged.

In quantitative research, the:

- data analysis consists of statistical analysis;
- data analysis involves describing trends, comparing group differences or relating variables;
- interpretation consists of comparing results with prior predictions and past research.

A quantitative approach is one where the analysis consists of breaking down the data into parts to answer the research questions. Statistical procedures, such as comparing groups or relating scores for individuals, provide information to address the research questions or hypotheses. The results of the analysis should then be interpreted in the light of initial predictions or prior studies. This interpretation is an explanation as to why the results turned out the way they did and the researcher explains how the results either support or refute the expected predictions in the study (Creswell, 2003).

The study's quantitative data was expressed in the form of ordinal scale variables and presented in tables. The researcher used descriptive statistical techniques to summarise characteristics of sample data. This means that the researcher wanted to make sense of collected data. This study attempted to make generalisations from a small sample to the larger population of educators. The data were analysed by means of a computer statistical package called Statistical Package for the Social Science (SPSS). Through this analysis the researcher worked out measures of central tendency, measures of variability and measures of relationship (correlation coefficients).

Because of the fact that the study consists of three distinct purposive samples as well as category variables to compare how many members of a sample fall into each of a number of descriptive categories, the researcher decided to conduct the Kruskal Wallis H-test. The Kruskal Wallis is the non-parametric analog to the ANOVA. Its purpose is essentially the same as that of the ANOVA

but it is not based on the same restrictive assumptions as that of the ANOVA (normal distribution, homogeneity of variance). It does however, presuppose that the design requirement has been met namely that there are more than two independent groups, i.e. the same subject cannot be in more than one group;

If the researcher has to compare two groups with regard to a continuous variable and has reason to believe that scores are not normally distributed or that the groups are not equal with regard to variance or we have a sample of  $n < 10$ , the Mann-Whitney U-test should be considered the appropriate test. The Mann Whitney U- test is the non parametric analog to the t- test. Theoretically the Mann Whitney U is a test of the differences between two population distributions and is based on the differences in ranks of scores between two groups (Pretorius, 1995). In this study the researcher used a Mann Whitney U- test to compare the respondents gender with their respective responses.

In terms of research aim 5 the researcher calculated the Spearman rank order correlation (*rho*) to determine whether there was any correlation between the years of teaching experience and the opinion of educators.

In addition frequency tables were also compiled to determine the overall response of participants in different descriptive categories (Buell, Hallam & Gallam-McCormick, 1999).

### **3.7 Summary**

This chapter focused on the research methodology and research design. The sampling procedures as well as the participants were presented by the researcher. A detailed discussion of the research instrument and its construction was provided, including information on how the items were evaluated for consistency using Cronbach's Alpha.

The researcher also outlined the procedures for the administration of the research instrument and provided information on how confounding variables were controlled. The latter part of this chapter dealt with the discussion on editing and coding of research data.

In the next chapter the presentation and detailed analysis of the data collected is undertaken, illustrating the contribution the findings made towards significant conclusions in the study.

## CHAPTER 4

### DATA PRESENTATION AND ANALYSIS

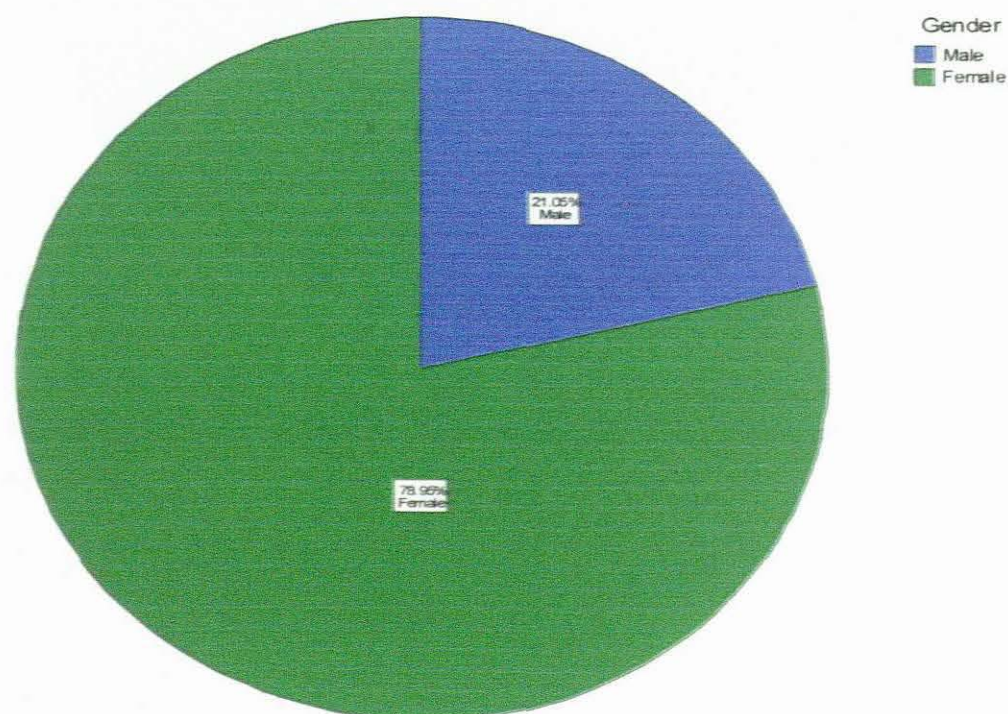
#### 4.1 Introduction

The previous chapter focussed on research design and methodology. The current chapter presents the results. It will also provide a comprehensive discussion of such findings. The chapter starts with a description of the actual sample and its characteristics and then proceeds with a detailed analysis of the main results.

#### 4.2 The final sample and its characteristics

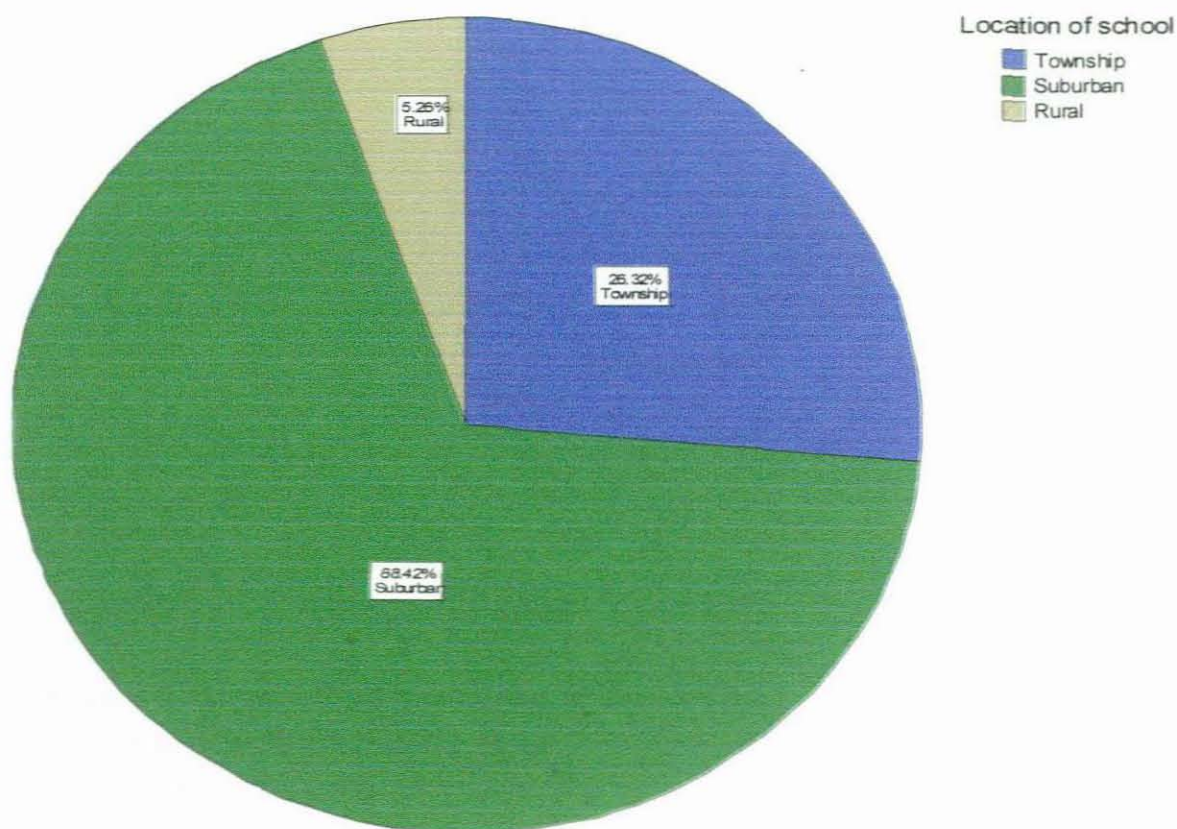
The sample consisted of 57 educators who teach at three different schools in the Cape Winelands district of the Western Cape Education Department. These three schools are Worcester-Oos Primary School (Afrikaans-medium school), Riverview Primary School (Afrikaans-medium school), PJB Cona Primary School (English-medium school). The sample consisted of 12 males and 45 female participants.

**Fig 4.1: Gender spread of participants**



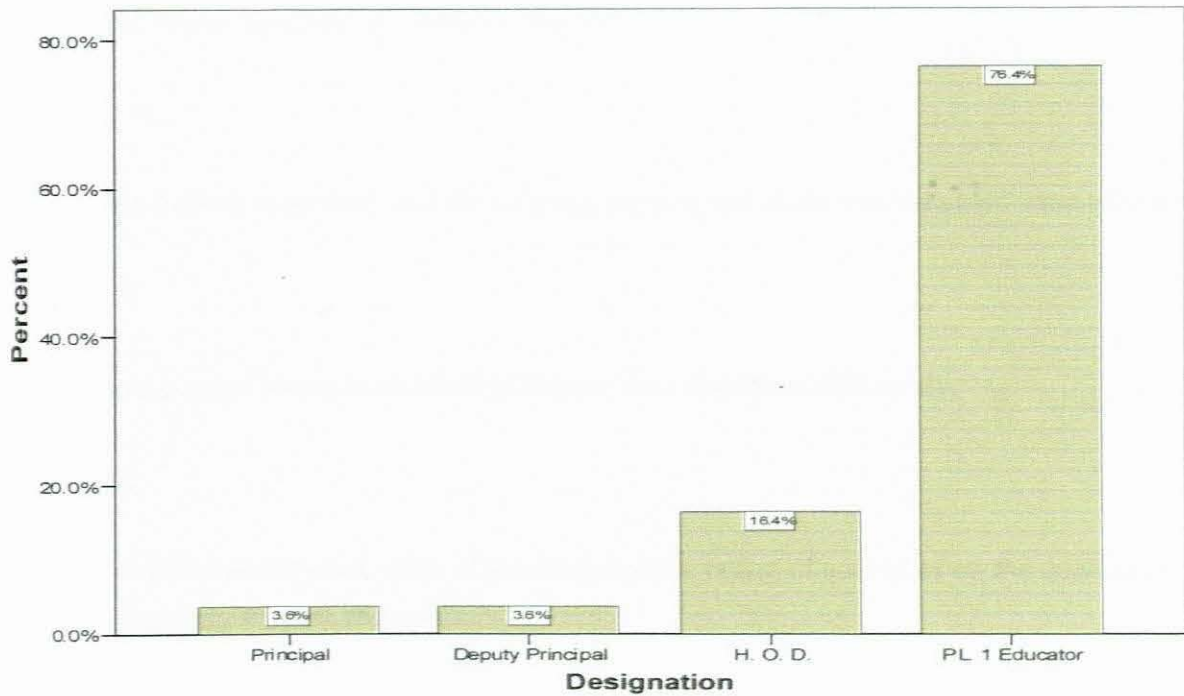
With regard to the location of the schools the sample was further divided into a 26.32 percent township group (PJB Cona), 68.42 percent suburban group (Riverview Primary & Worcester-Oos Primary) and 5.26 percent rural group. Three teachers from Riverview Primary School classified their school as a rural school due to its lack of infrastructure and their learners place of origin as pointed out in the previous chapter.

**Fig.4.2 : Distribution of sample according to location of school**



The sample had 2 principals, 2 deputy principals, 9 heads of departments and 44 post level one educators

**Fig. 4.3: Distribution of sample according to rank of educators**



### **4.3 Reiteration of research assumptions and hypotheses**

As indicated in chapter 1 the researcher formulated use of four research assumptions (Assumptions 1-4) and two hypotheses (Hypotheses 1&2). These are as follow:

Assumption 1:

The training provided to educators, was effective for the successful implementation of inclusive education.

Assumption 2:

The educators believe that the levels of support they received from the Department of Education were effective.

### Assumption 3:

The educators who participated in this study believe that the skills they acquired were effective for the successful implementation of inclusive education.

### Assumption 4:

The educators believe in general that the training, support and skills they received were effective.

### Hypotheses 1

The educators' gender, location and rank influence their responses differently.

### Hypotheses 2

There is no correlation between years of teaching and the rating of educators on the dependent variables of training, support and skills.

## 4.4 Data analysis

The researcher's choice of descriptive statistics was explained in the previous chapter, because the main objective of this research was to determine the opinions of the educators.

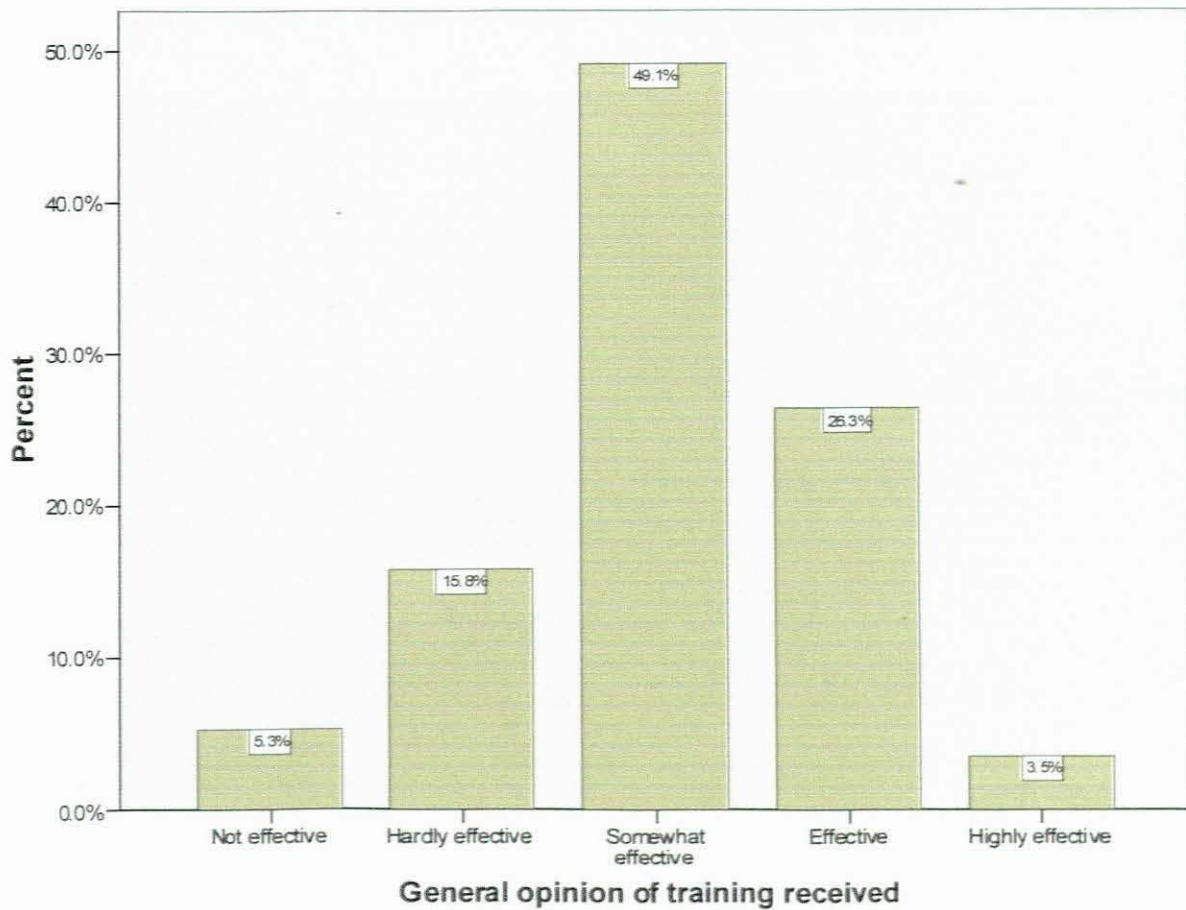
An analysis of the four dependent variables, i.e training, support, skills and general revealed the following information.

### 4.4.1 Assumption One

- **Training** – In order to examine the responses of educators on this variable, a series of frequencies were tallied (Buell, Hallam, Gamel- McCormick & Scheer, 1999). These frequencies were then converted to a composite score for all five items of the training scale. The finding was that 78.9 percent of the educators were of the opinion that the training they received was effective, somewhat to highly effective.

Fig. 4.4 shows the results and it also summarizes the opinions of educators on the dependent variable of training. This clearly illustrates overwhelming support for the first hypotheses, namely that “educators are of the opinion that the training they received for the successful implementation of inclusive education” was effective.

**Fig 4.4: Graphic display of educators' beliefs of effectiveness of training**



**Interpretation: There is overwhelming support in favour of this assumption.**

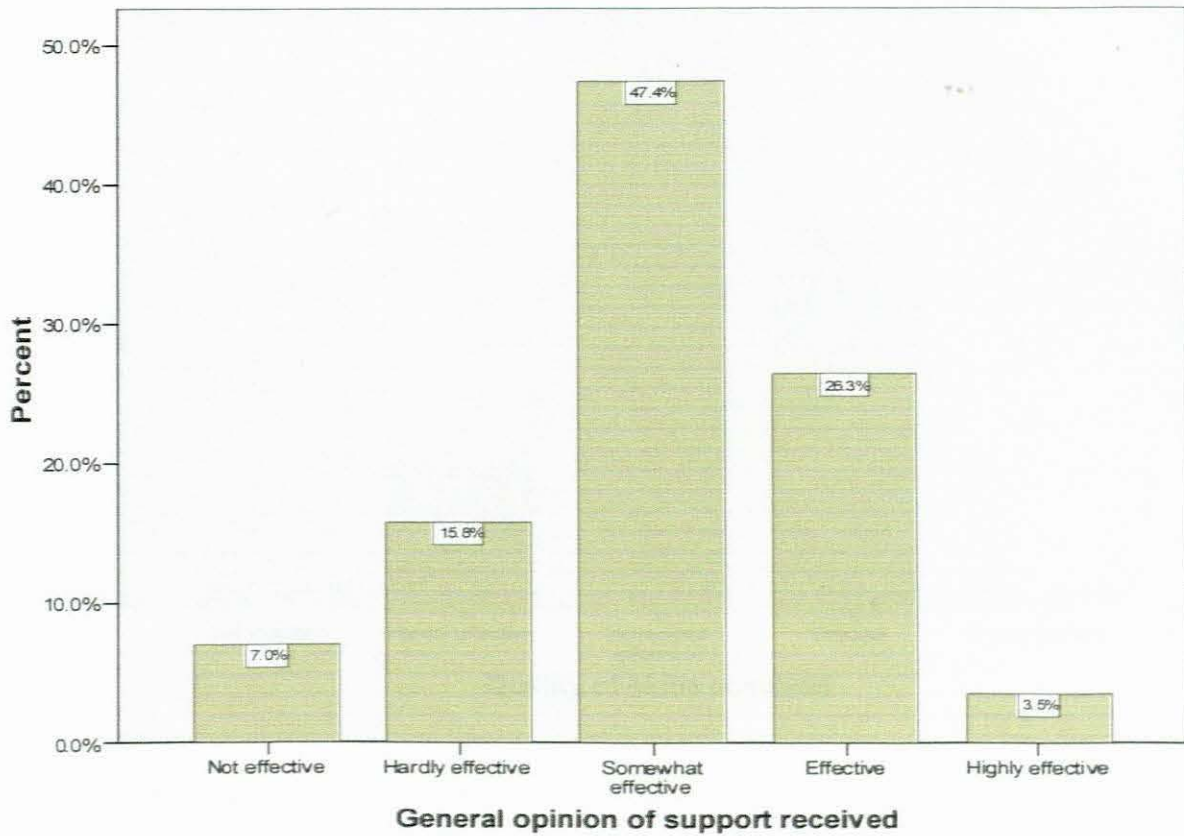
#### 4.4.2 Assumption Two

- **Support**-In order to examine the responses of educators on this variable a series of frequencies were tallied (Buell, Hallam, Gamel – McCormick & Sheer, 1999). These frequencies were then converted to a composite score for all four items of the support scale. The result was that 77.2 percent of the educators indicated that the support they received from various levels of the Department of Education was from somewhat effective to highly effective.

Fig. 4.5 displays the opinions of educators on the dependent variable of support. It can be seen that educators' opinions are overwhelming in favour of hypotheses 2, which shows that educators are

strongly of the opinion that support they received from the Department of Education stretching from somewhat effective to highly effective.

**Fig. 4.5: Graphic display of educators' beliefs of effectiveness of support**

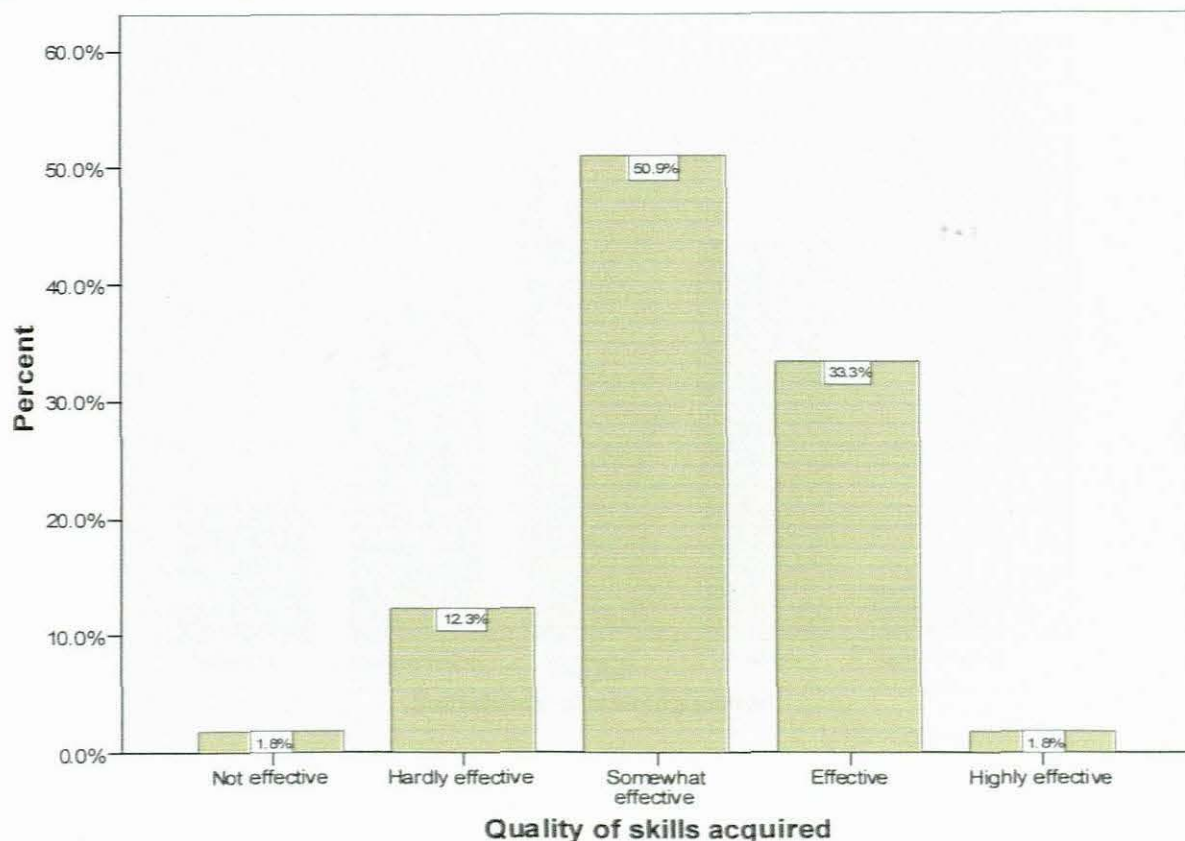


**Interpretation:** There is an overwhelming support in favour of this assumption.

#### 4.4.3 Assumption Three

- **Skills-** In order to examine the responses of educators on this variable a series of frequencies were tallied (Buell, Hallam, Gamel- McCormick & Sheer, 1999). These frequencies were then converted to a composite score for all four items of the skill scale. The finding was that 86 percent of educators indicated that the skills they acquired for the successful implementation of inclusive education is from somewhat effective to highly effective. Fig. 4.6 shows that the educators' opinions are overwhelming in favour of assumption three.

**Fig 4.6: Graphic display of educators' beliefs of skills acquired**

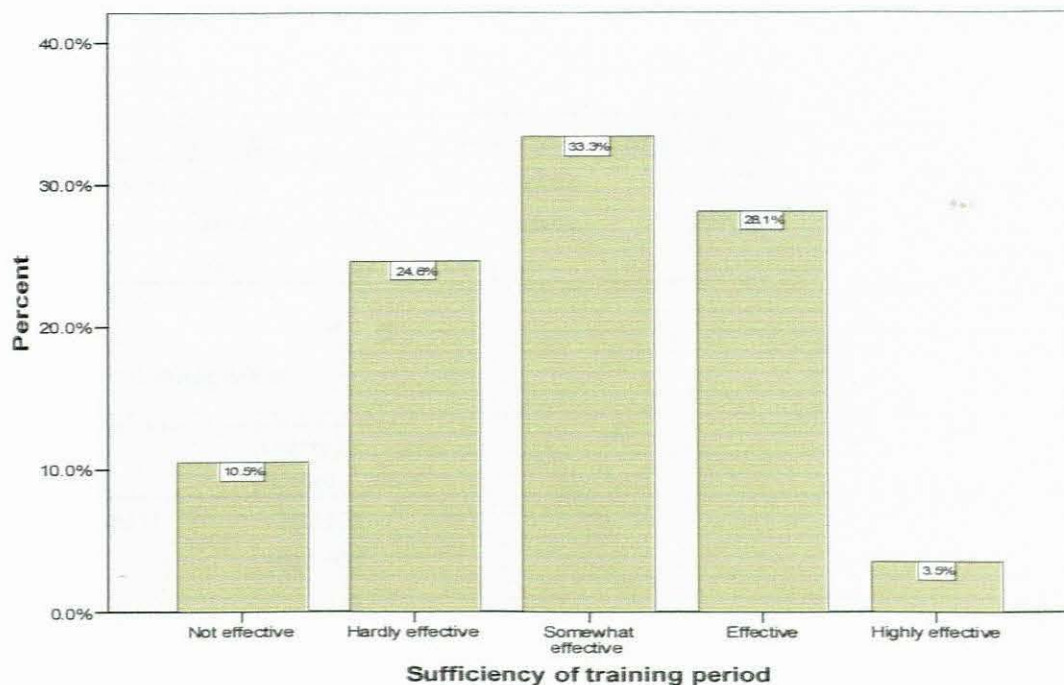


**Interpretation: There is an overwhelming support in favour of this assumption.**

#### 4.4.5 Assumption Four

- **General** – In order to examine the responses of educators to this variable a series of frequencies were tallied (Buell, Hallem, Gamel- McCormick & Sheer, 1999). These frequencies were then converted to a composite score for all items of the general scale. The result was that 64.4 percent of the educators were of the opinion that the training, support and skills in general ranged from somewhat effective to highly effective. Fig. 4.7 shows that the educators' opinions are in favour of assumption four.

**Fig. 4.7** Graphic display of educators' beliefs of effectiveness in general



**Interpretation:** There is an overwhelming support in favour of this assumption.

#### **4.5 Comparing the means of two independent groups to determine difference on the basis of gender, location and rank.**

##### **4.5.1 Testing for difference on the basis of gender (Hypotheses 1)**

The researcher conducted a Mann Whitney U-test to determine whether there was a significant difference in the means of the two samples with regard to gender. The Mann Whitney U-test is the non-parametric equivalent of the two sample t-test. Theoretically the Mann Whitney is a test for the difference between two population distributions and like all non-parametric tests is based on the differences in ranks of scores between two groups (Pretorius, 1995).

**Results of Mann Whitney U-test performed on the scores of male and female respondents.**

**Table 4.1 Results of Mann Whitney U-test performed on the male and female respondent' scores obtained from the training scale.**

**Ranks**

	Gender	N	Mean Rank	Sum of Ranks
Training received	Male	12	29.63	355.50
	Female	45	28.83	1297.50
	Total	57		

**Test Statistics(a)**

	Training received
Mann-Whitney U	262.500
Wilcoxon W	1297.500
Z	-.149
Asymp. Sig. (2-tailed)	.882

a Grouping Variable: Gender

A Mann Whitney U-test was used to test whether there is a difference between male and female participants in their ratings of the dependent variable of training received. The results was found to be statistically different ( $Z = -0.149$ ,  $p < 0.05$ ).

**Table 4.2 Results of Mann Whitney U-test performed on the male and female respondent' scores obtained from the support scale.**

**Ranks**

	Gender	N	Mean Rank	Sum of Ranks
Support received	Male	12	29.25	351.00
	Female	45	28.93	1302.00
	Total	57		

**Test Statistics(a)**

	Support received
Mann-Whitney U	267.000
Wilcoxon W	1302.000
Z	-.059
Asymp. Sig. (2-tailed)	.953

A Mann Whitney U-test was used to test whether there is a difference between male and female participants in their ratings of the dependent variable of support received. The results was found to be statistically different ( $Z = -0.059$ ,  $p < 0.05$ ).

**Table 4.3 Results of Mann Whitney U-test performed on the male and female respondent' scores obtained from the skills scale.**

#### Ranks

	Gender	N	Mean Rank	Sum of Ranks
Skills received	Male	12	32.17	386.00
	Female	45	28.16	1267.00
	Total	57		

**Test Statistics(a)**

	Skills received
Mann-Whitney U	232.000
Wilcoxon W	1267.000
Z	-.757
Asymp. Sig. (2-tailed)	.449

a Grouping Variable: Gender

A Mann Whitney U-test was used to test whether there is a difference between male and female participants in their ratings of the dependent variable of skills received. The results was found to be statistically different ( $Z = -0.757$ ,  $p < 0.05$ ).

**Table 4.4 Results of Mann Whitney U-test performed on the male and female respondents' scores obtained from the general opinion scale.**

Ranks				
	Gender	N	Mean Rank	Sum of Ranks
General opinion	Male	12	29.67	356.00
	Female	45	28.82	1297.00
	Total	57		

	General opinion
Mann-Whitney U	262.000
Wilcoxon W	1297.000
Z	-.164
Asymp. Sig. (2-tailed)	.870

a Grouping Variable: Gender

A Mann Whitney U-test was used to test whether there is a difference between male and female participants in their ratings of the dependent variable of general opinion. The results was found to be statistically different ( $Z = -0.164$ ,  $p < 0.05$ ).

#### 4.5.2 Testing for difference on the basis of location (Hypotheses 1)

The researcher subsequently used a Kruskal-Wallis test in respect of the location of the educators to determine whether there was any significant difference between the two means.

**Table 4.5: Results of the Kruskal-Wallis test performed on the respondents' scores obtained from the training scale.**

Ranks				
	Location of school	N	Mean Rank	
Training received	Township	15	16.07	
	Suburban	39	34.00	
	Rural	3	28.67	
	Total	57		

**Test Statistics(a,b)**

	Training received
Chi-Square	
df	2
Asymp. Sig.	.001

a Kruskal Wallis Test

b Grouping Variable: Location of school

The results were found to be significant. This means that the location of school does influence the participants' responses differently.

**Table 4.6: Results of the Kruskal-Wallis test performed on the respondents' scores obtained from the support scale.**

**Ranks**

	Location of school	N	Mean Rank
Support received	Township	15	18.47
	Suburban	39	33.45
	Rural	3	23.83
	Total	57	

**Test Statistics(a,b)**

	Support received
Chi-Square	9.347
df	2
Asymp. Sig.	.009

a Kruskal Wallis Test

b Grouping Variable: Location of school

The results were found to be significant. This means that the location of the school does influence the participants' responses.

**Table 4.7: Results of the Kruskal-Wallis test performed on the respondents' scores obtained from the skills scale.**

Ranks			
	Location of school	N	Mean Rank
Skills received	Township	15	14.83
	Suburban	39	34.65
	Rural	3	26.33
	Total	57	

**Test Statistics(a,b)**

Skills received	
Chi-Square	16.076
df	2
Asymp. Sig.	.000

a Kruskal Wallis Test

b Grouping Variable: Location of school

The results were found to be significant. This means that the location of the school does influence the participants' responses differently.

**4.5.3 Testing for difference in the means on the basis of rank (Hypotheses 1)**

The researcher decided to conduct a Kruskal-Wallis test to determine whether there was any difference in the opinion of educators on the basis of rank.

**Table 4.8: Results of the Kruskal-Wallis test performed on the respondents' scores obtained from the training scale.**

Rank			
	Designation	N	Mean Rank
Training received	Principal	2	18.50
	Deputy Principal	2	36.50
	H. O. D.	9	38.56
	PL 1 Educator	42	25.79
	Total	55	

**Test Statistics(a,b)**

	Training received
Chi-Square	6.151
df	3
Asymp. Sig.	.104

a Kruskal Wallis Test

b Grouping Variable: Designation

The results proved not to be statistically-significant. This means that the designation of the educators does not influence the participants' responses.

**Table 4.9: Results of the Kruskal-Wallis test performed on the respondents' scores obtained from the support scale.**

Rank			
	Designation	N	Mean Rank
Support received	Principal	2	24.25
	Deputy Principal	2	31.50
	H. O. D.	9	32.44
	PL 1 Educator	42	27.06
	Total	55	

**Test Statistics(a,b)**

	Support received
Chi-Square	1.069
df	3
Asymp. Sig.	.784

a Kruskal Wallis Test

b Grouping Variable: Designation

The results proved not to be statistically-significant. This means that the designation of the educators does not influence the participants' responses.

**Table 4.10: Results of the Kruskal-Wallis test performed on the respondents' scores obtained from the skills scale.**

Rank			
	Designation	N	Mean Rank
Skills received	Principal	2	25.25
	Deputy Principal	2	25.25
	H. O. D.	9	34.61
	PL 1 Educator	42	26.85
	Total	55	

Test Statistics(a,b)	
Skills received	
Chi-Square	1.935
df	3
Asymp. Sig.	.586

a Kruskal Wallis Test

b Grouping Variable: Designation

The results proved not to be statistically-significant. This means that the designation of the educators does not influence the participants' responses.

#### **4.5.4 Testing for correlation between years of teaching experience and opinion (Hypotheses 2)**

The researcher conducted a Spearman *rho* in order to determine if there is any correlation between years of teaching experience and the rating that educators gave regarding their opinion of the four dependent variables.

**Table 4.11 Results of the Spearman rank correlation co-efficient that was performed in respect of years of teaching experience on training.**

Correlation			Years of teaching experience	Training received
Spearman's rho	Years of teaching experience	Correlation Co-efficient	1.000	.171
		Sig. (2-tailed)	.	.208
		N	56	56
	Training received	Correlation Co-efficient	.171	1.000
		Sig. (2-tailed)	.208	.
		N	56	57

The results show a null hypotheses is retained i.e. there is no correlation between years of teaching experience and the opinion of the educators.

**Table 4.12 Results of the Spearman rank correlation co-efficient that was performed in respect of years of teaching experience on support.**

Correlation			Years of teaching experience	Support received
Spearman's rho	Years of teaching experience	Correlation Coefficient	1.000	.251
		Sig. (2-tailed)	.	.062
		N	56	56
	Support received	Correlation Coefficient	.251	1.000
		Sig. (2-tailed)	.062	.
		N	56	57

The results show a null hypotheses is retained i.e. there is no correlation between years of teaching experience and the opinion of the educators.

**Table 4.13 Results of the Spearman rank correlation co-efficient that was performed in respect of years of teaching experience on skills.**

Correlation			Years of teaching experience	Skills received
Spearman's rho	Years of teaching experience	Correlation Coefficient	1.000	.222
		Sig. (2-tailed)	.	.100
		N	56	56
	Skills received	Correlation Coefficient	.222	1.000
		Sig. (2-tailed)	.100	.
		N	56	57

The results show a null hypotheses is retained i.e. there is no correlation between years of teaching experience and opinion of educators.

**Table 4.14 Results of the Spearman rank correlation co-efficient that was performed in respect of years of teaching experience on general opinion.**

Correlation			Years of teaching experience	General opinion
Spearman's rho	Years of teaching experience	Correlation Co-efficient	1.000	.226
		Sig. (2-tailed)	.	.095
		N	56	56
	General opinion	Correlation Coefficient	.226	1.000
		Sig. (2-tailed)	.095	.
		N	56	57

The results show a null hypotheses is retained i.e. There is no correlation between years of teaching experience and opinion of educators.

#### 4.6 Summary

The present chapter focused on the presentation and analysis of the data collected. The researcher provided a breakdown of the final sample in terms of gender, location and rank. This was presented in bar graphs to make it visually friendly to the reader.

Since the researcher had to compare two groups with regard to a continuous variable and with a sample of  $n < 10$  the decision falls on a Mann-Whitney U-test. A Kruskal-Wallis H-test was calculated to compare three means.

Finally, the researcher calculated a Spearman rank *rho* correlation co-efficient to determine whether there was any association between years of teaching experience and the opinion of educators in terms of the four variables.

The researcher wishes to point out that one crucial finding of these statistical results is that all evidence point to the fact that educators who participated in this study are of the opinion that the training, support and skills they received was effective.

Chapter five will focus on the discussions of the findings, conclusions, recommendations and limitations of the study.

## CHAPTER 5

### CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

The previous chapter focused on the presentation and discussion of the main findings of the study. The current chapter will attempt to draw certain conclusions from those findings. Limitations of the study will be discussed and recommendations, where necessary, will be made.

#### 5.2 Discussion of findings as per research aim

The researcher would like to point out the necessity to have a combination of research assumptions and hypotheses. This is the result of the fact that the whole research project was about the opinions of educators on training, support, skills and on a general level.

##### 5.2.1 Findings with regard to aim number one

This study focused on the opinions of educators in terms of the training they received in preparation for the successful implementation of inclusive education in the Cape Winelands District of the Western Cape Education Department. The assumption was that the training educators received in the past was effective.

The majority of educators in this study were of the opinion that the training they received from the Western Cape Education Department ranged from somewhat effective to highly effective which is quite surprising because it differed from the findings of other similar studies on inclusive education. The reviewed literature in Chapter 2 revealed those educators, local as well as abroad, who viewed training as one of the major concerns that needs to be addressed before inclusive education can be successfully implemented (Creese & Daniels, 1997; Ainscow, 2000; Prinsloo, 2001; Engelbrecht, Oswald, Swart & Eloff, 2003). Naicker (1999) is of the opinion that all educators should be retrained over a period of ten years. The challenge in this regard would then be the practicality of such a decision. This, as well as providing details of the content of such training programmes, remain grey areas that need further research.

The training that the educators who participated in this study received was regarded as effective in preparation for the successful implementation of inclusive education. It is also the opinion of the researcher that both pre-service and in-service level of training should get the same attention and emphasis because these were educators who only worked in mainstream school settings for the duration of their professional careers.

### **5.2.2 Findings with regard to aim number two**

The research assumption with regard to aim number two was that educators believe that the levels of support they received from the Department of Education were effective. The research findings clearly illustrated that 77,2% of educators considered the support they received from somewhat effective to highly effective, which obviously provided overwhelming support for this assumption.

As stated in Chapter 2 the present study mainly investigated the issue of classroom support as suggested by Rose (2000), as well as the professional collaboration between educators at school, district and provincial levels (Mastropieri & Scruggs, 2004). This emphasizes co-operation, effective communication, shared problem solving, planning and finding solutions as key elements of such collaboration.

### **5.2.3 Findings with regard to aim number three**

This research assumption was that educators who participated in this study believe that the skills they acquired were effective for the successful implementation of inclusive education.

The findings were also consistent with those of training and support. Eighty six percent (86%) of the educators who participated in this study were of the opinion that the skills they received in preparation for the successful implementation of inclusive education ranged from somewhat effective to highly effective.

### **5.2.4 Findings with regard to aim number four**

The research evidence suggested that there was a difference between male and female participants in their ratings of the dependent variables of general opinions. Evidence also suggested that the location of the school did influence the participants' responses in their ratings of the dependent variables. Research evidence suggested further that the designation of educators did not influence the participants' responses.

## **5.3 Limitations of the study**

### **5.3.1 Sample**

The size of the sample could be regarded as a weakness because it questions the generalisability of the findings in relation to the rest of the educator population. The balance between urban and township school could have been more even. The sample was also restricted to only one region of the Western Cape Education Department. The gender difference in the number of participants could also be regarded as a weakness.

### **5.3.2 Questionnaire construction**

The questionnaire did not include items to measure educators' ratings of the support they received from parents or spouses. This was a very important issue highlighted in previous studies (Mastropieri & Scruggs, 2004), it could also lead to sustainability and the success of inclusive education.

### **5.3.3 Data collection**

Data was only collected through one specific method, namely the administration of a questionnaire. Lots of other rich information could have been gathered had another method (perhaps a qualitative method) been used. Time constraints, however, made this virtually impossible as schools were also involved in intervention programmes run by the Education Department.

## **5.4 Recommendations**

### **5.4.1 Training**

Closer collaboration between all stakeholders in education should take place. There should also be more communication between the Education Department and tertiary institutions, especially as far as the training of educators is concerned. The decline in the numbers of educators over the last decade is seen as one major source of concern. The government therefore should aggressively make the education profession more attractive in order to recruit new teachers.

As far as the in-service training of educators is concerned, too little time is being spent on training of educators because training cannot be restricted to after school hours or school holidays. The idea would be to take educators out of the school environment to follow a three month course at an identified tertiary institution. This will also ensure a significant paradigm shift on the part of educators which is so important for the successful implementation of inclusive education.

In order to prevent educators from a burn-out syndrome and to keep up with the development in the education system, a continuous professional development system should be introduced.

### **5.4.2 Support**

#### **5.4.2.1 Parental Involvement**

The immediate to short-term steps of the implementation of inclusive education would have to include a national advocacy programme amongst others. This would have been aimed at parents as well because it is widely believed that parents could play a significant role in assuring the successful implementation of inclusive education. The reality of this is that many parents have not yet been included in the process.

Parents should be more involved, not only with extra-curricular activities such as fundraising, but could also serve on multi-disciplinary boards which is very important in inclusive education.

The establishment of District Support Teams is still in progress. These teams will comprise of officials from the District Educational offices. These officials will include circuit managers, curriculum advisors, psychologists, learning support advisors, social workers and administrative personnel. In the Western Cape it is expected of these teams to operate as from 1 April 2008.

#### **5.4.2.2 Skills**

This is an area which needs to be explored further especially around the skills educators need to have for the successful implementation of inclusive education.

#### **5.5 Conclusion**

The present study brought forward findings which may be further unpacked in future studies. Educators who have access to resources and effective support structures are bound to make a difference or have a positive impact on the lives of learners who experience a diversity of barriers to learning and development. A lack of these important requirements may lead to a despondent and negative educator corps.

## REFERENCES

- Alexander, R., Rose, J. & Woodhead, C. (1992). *Curriculum Organisation & Classroom Practice in Primary Schools*. London: HMSO.
- Ainscow, M. (1997). Towards inclusive schooling. *British Journal of Special Education*, 24(1):3-6
- Ainscow, M. (2000). The next step for special education: supporting the development of inclusive practices. *British Journal of Special Education*, 27(2):76-80.
- Antonak, R.F & Livneh, H. (1988). *The measurement of attitudes toward people with disabilities: Methods, psychometrics and scales*. Springfield, IL: Charles C. Thomas.
- Avramidis, E., Bayliss, P. & Burden, R. (2000). Student teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school. *Teaching and Teacher Education*, 16, 277-293.
- Bassett, D. & Smith, T. (1996). Transition in an era of reform. *Journal of Learning Disabilities*, 29, 161-166.
- Batsche, C., Hernandez, M. & Montenegro, M.C. (1999). *Community Needs Assessment with Hispanic, Spanish-monolingual Residents*. *Evaluation and Program Planning*, 22,1.
- Behr, A.L. (1988). *Empirical research methods for the human sciences* (Second Edition). Durban: Butterworth.
- Bennet, N. & Cass, A. (1988). Learning and Instruction: The effects of group work. *International Journal of Educational Research*, 1(2), 103-118.
- Bishop, A. & Jones, P. (2002). Promoting inclusive practice in primary initial teacher training: influencing hearts as well as minds. *Support for Learning*, 17(2):58-63.

- Borg, W.R. & Gall, M.D. (1989). *Educational research: An introduction* (Fifth Edition). New York: Longman.
- Bothma, M., Gravett, S. & Swart, E. (2000). The attitudes of primary school teachers towards inclusive education. *South African Journal of Education*, 20(3):200-204.
- Bradley, D.F., King-Sears, M.E. & Tessier-Switlick, D.M. (1997). *Teaching students in Inclusive Settings: From Theory to Practice*. Boston Mass: Allyn and Bacon.
- Buell, M.L., Hallam, R. & Gamal-McCormick, M. (1999). A survey of general and special education teachers' perceptions and in service needs concerning inclusion. *International Journal of Disability, Development and Education*, 46(2):143-156.
- Byers, R. & Rose, R. (1996). *Planning the curriculum for pupils with special educational needs*. David Fulton, London.
- Chapman, L. & Ware, J. (1999). Challenging traditional roles and perceptions: Using a transdisciplinary approach in an inclusive mainstream school. *Support for Learning*, 14(3): 104-108.
- Chen, M.R. & Miller, G. (1997). *Teacher Stress: A Review of the International Literature*. ERIC Document 410 187.
- Chow, P. & Winzer, M.M. (1992). Reliability and validity of a scale measuring attitudes toward mainstreaming. *Educational and Psychological Measurement*, 52, 223-228.
- Cohen, L. & Manion, L. (1995). *Research methods in education* (Fourth Edition). Routledge: USA.

- Cole, K.N., Mills, P.E., Dale, P.S. & Jenkins, J.R. (1991). Effects of preschool integration for students with disabilities. *Exceptional Students*, 58, 36-46.
- Corbett, J. (2001). Teaching approaches which support inclusive education: a connective pedagogy. *British Journal of Special Education*, 28(2):55-59.
- Cowie, H. & Rudduck, J. (1988). Learning together, working together. BP Educational Services.
- Creese, A., Daniels, H. & Norwich, B. (1997). *Teacher support teams in primary and secondary schools*. London: Dave Fulton Publishers.
- Creswell, J.W. (2003). Research design: *qualitative, quantitative and mixed methods approaches* (Second Edition). Lincoln: SAGE Publications.
- Dawson, B. & Trapp, R.G. (2004). *Basic & clinical biostatistics* (Fourth Edition). USA: Lange Medical Books.
- DES (1989) *Discipline in Schools (The Elton Report)*. London: HMSO.
- Elkins, J. (1994). The school context. In A. Ashman & J. Elkins (Eds.), *Educating children with special needs* (2<sup>nd</sup> ed., pp. 71-103). Sydney: Prentice Hall.
- Engelbrecht, P., & Forlin, C. (1998). Pre-service teachers' acceptance of and social interactions with persons with disabilities: The South African scene. *African Journal of Special Needs Education*, 3:1-10.
- Engelbrecht, P., Oswald, M., Swart, E. & Eloff, I.(2003). Including learners with intellectual disabilities: Stressful for teachers? *International Journal of Disability, Development and Education*, 50(3):293-308.
- Engelbrecht, P., Green, L., Naicker, S. & Engelbrecht, L. (eds.) (1999). *Inclusive education in action in South Africa*. Goodwood: Van Schaik.

- Evans, J., Lunt, I., Wendell, K. & Dyson, A. (1999). *Collaborating for effectiveness: empowering schools to be inclusive*. Buckingham: Open University Press.
- Fielding-Barnsley, R. (2005). The attributes of a successful Learning Support Teacher in Australian inclusive classrooms. *Journal of Research in Special Educational Needs*, 5(2):68-76.
- Florian, L. & Rouse, M. (2001). Inclusive practice in English: lessons learned. *Cambridge Journal of Education*, 31 (3), pp. 399-412.
- Forlin, C. (2001). Inclusion: Identifying potential stressors for regular class teachers. *Educational Research*, 43(3):235-245.
- Forlin, C., Douglas, G. & Hattie, J. (1996). Inclusive practices: How accepting are teachers? *International Journal of Disability, Development and Education*, 43(2):119-133.
- Fullan, M. (1993). *The new meaning of educational change*. New York: Teachers College Press.
- Galton, M. & Williamson, J. (1992). *Group Work in the Primary Classroom*. London Routledge
- Garner, P. (1996) Students' views on special educational needs courses in initial teacher education. *British Journal of Special Education*, 23(4):176-179.
- Garner, P. (2000) Pretzel only policy? Inclusion and the real world of initial teacher education. *British Journal of Education*, 27(3):230-234.
- Giangreco, M.F., Dennis, R., Cloninger, C., Edelman, S. & Schattman, R. (1993). "I've counted Jon": Transformational experiences of teachers educating students with disabilities. *Exceptional Children*, 19, 339-372.
- Giangreco, M.F. (1997) Key lessons learned about inclusive education, summary of the 1996 Schonell memorial lecture. *International Journal of disability*, 44 (3), pp. 193-206.
- Glomb, N.K., & Morgan, D.P. (1991). Resource room teachers' use of strategies that promote the success of handicapped students in regular classrooms. *Journal of Special Education*, 25, 221-235.
- Guralnick, M.J. (1991). *Education for all children*. Paper presented at the 15<sup>th</sup> National Conference of the Australian Association of Special Education, Brisbane, Queensland.

- Goodman, W.L. & Goodwin, L.D. (1996). *Understanding quantitative and qualitative research in early childhood education teachers*. Columbia University: College Press.
- Hall, R. & Engelbrecht, P. (1999). The possible role of special schools in inclusive education. *South African Journal of Education*, 19(3):230-234.
- Hammond, C. & Read, G. (1992). The Interface between the Curriculum and the Code. *British Journal of Special Education*, 24(1): 27-29.
- Hay, J.F. (2003). Implementation of the inclusive education paradigm shift in South African education support services. *South African Journal of Education*, 23(2):135-138.
- Hay, J.F., Smit, J. & Paulsen, M. (2001). Teacher preparedness for inclusive education. *South African Journal of Education*, 21(4):213-218.
- Hegarty, S. (1992). *Education Children and Young People with Disabilities: principles and the review of practice* (Paris, United Nations Educational, Scientific and Cultural Organization, ERIC Document Reproduction Service No. ED 364 024).
- Hornby, G., Atkinson, M. & Howard, J. (1997). *Controversial Issues in Special Education*. London. David Fulton.
- Huysamen, G.K. (1998). *Methodology for the social and behavioural sciences*. South Africa: Thomson publishing.
- Johnson, A.P. (2005). *A short guide to action research*. USA: Pearson.
- Johnson, D.W. & Johnson, R. (1982). Student – Student Interaction: Ignored but Powerful. *Journal of Teacher Education*, 36:22-26.
- Kauffman, J.M. & Hallahan, D.P. (1995). *The illusion of full inclusion: A comprehensive critique of a current special education bandwagon*. USA: ProEd
- Kavale, K.A. & Forness, S.R. (2000). History, rhetoric and reality: Analysis of the inclusion debate. *Remedial and Special Education*, 21, 279-296.
- Kgare, G.D. (1999) The role of the education support services in the implementation of inclusive education. Unpublished M.Ed thesis. Auckland Park: RAU.
- Kerry, T. (1982). *Mixed ability teaching*. Educational Research and Development in Britain. NFER Nelson, Windsor.

- King-Sears, M. (1995). Teamwork toward inclusion. A school system and university partnership for practicing educators. *Action in Teacher Education*, 17(3), 54-66.
- Kyriakides, L., Demetriou, D. & Charalambous, C. (2006). Generating criteria for evaluating teachers through teacher effectiveness research. *Educational Research*, 48(1):1-20
- Lacey, P. & Lomas, J. (1993). *Support services and the curriculum: A practical guide to collaboration*. London: David Fulton Publishers.
- Larrivee, B. & Cook, L. (1979). Mainstreaming: A study of the variables affecting teacher attitude. *Journal of Special Education*, 13, 313-324.
- Lazarus, S., Daniels, B. & Engelbrecht, L. In Engelbrecht, et al. (1999). *The inclusive school*. Goodwood: Van Schaik.
- Lazarus, S. & Donald, D. (1994). *The development of education support services in South Africa: Basic principles and a proposed model*. Bellville: EPU.
- Lewis, T. (1991). Difficulties attending the new vocationalism in the USA. *Journal of Philosophy of Education*, 25(1), 95-108.
- Lipsky, D.K. & Gartner, A. (1996). Inclusion, school restructuring and the remaking of American society. *Harvard Educational Review*, 66(4):762-796.
- Lomofsky, L. & Lazarus, S. (2001). South Africa: First steps in the development of an inclusive education system. *Cambridge Journal of Education*, 1(3):330-317.
- Lorenz, S. (2002). *First steps in inclusion: A handbook for parents, teachers, governors and LEAs*. Great Britain: Bell & Bain.
- Marozas, D.S., & May, D.C. (1988). *Issues and practices in special education*. New York: Longman.

- Mastropieri, M. A. & Scruggs, T.E. (2004). *The inclusive classroom strategies for effective instruction* (2<sup>nd</sup> Edition). New Jersey: Pearson.
- McConkey, R. & McCormack, B. (1984). Preparing non retarded young persons to meet mentally retarded adults. *American Journal of Mental Deficiency*, 88(6): 691-694.
- McNamara, S. & Moreton, G. (1997). Understanding Differentiation: A Teachers' Guide. *British Journal of Special Education*, 19(1):16-19.
- Miller, O. & Garner, M. (1996). Professional development to meet special educational needs. *British Journal of Special Education*, 23(2):70-74.
- Miller, K. & Savage, L. (1995). *Including general educators in inclusion*. Paper presented at the American Council on Rural Special Education Annual Conference, Las Vegas, NV. (ERIC Document Reproduction Service No. ED 381 322).
- Mittler, P. (1992). Preparing all initial teacher training students to teach children with special educational needs: A case study from England. *European Journal of Special Needs Education*, 7, 1-10.
- Mittler, P. (1994). *Education for all or for some? An International perspective*. Paper presented at the 6<sup>th</sup> joint national conference of the National Council on Intellectual Disability and the Australian Society for the study of Intellectual Disability, Fremantle, Western Australia.
- Mouton, J. (2001). *How to succeed in your master's & doctoral studies: A South African guide and resource book*. Pretoria: Van Schaik Publishers.

- Moyles, J. (1992). *Organizing for Learners in the Primary Classroom: A Balanced Approach to Classroom Management*. Open University Press.
- Mukherjee, S., Lightfoot, J. & Sloper, P. (2000). The inclusion of pupils with chronic health condition in mainstream school: What does it mean for teachers? *Educational Research*, 42(1):59-72.
- Murray-Seegert, C. (1992). Integration in Germany: Mainstreaming or swimming upstream? *Remedial and Special Education*, 13, pp.34-43.
- Naicker, S.M. (1999). Curriculum 2005: A space for all. An introduction to Inclusive Education. Cape Town: Tafelberg Publishers.
- Peck, C.A., Donaldson, J. & Pezzoli, M. (1990). Some benefits nonhandicapped adolescents perceive for themselves from their social relationships with peers who have severe disabilities. *Journal of the Association for Persons with Severe Handicaps*, 15, 241-249.
- Peck, C., Odom, S. & Bricker, D. (Eds.) (1993). *Integrating young students with disabilities into community programs: Ecological perspectives on research and implementation*. Baltimore: Paul H. Brookes.
- Perrot, E. (1982). Using questions in classroom discussions. In A. Pollard (Ed.), *Reading for reflective teaching*. London/ New York: Continuum.
- Phillips, S., Goodwin, J. & Heron, R. (1999). *Management of skills for SEN co-ordinators in the primary school*. London: Falmer Press.
- Pollard, A. & Tann, S. (1994). *Reflective Teaching in the Primary School* (2<sup>nd</sup> Ed.). London: Casell.

- Pretorius, T., (1995). *Inferential Statistics: Hypotheses testing and decision-making*. Cape Town: Percept Publishers.
- Prinsloo, E. (2001). Working towards inclusive education in South African classrooms. *South African Journal of Education*, 21(4): 344-348.
- Ringlaben, R.P., & Price, J.R. (1981). Regular classroom teachers' perceptions of mainstreaming effects. *Exceptional Children*, 47, 302-304.
- Robertson, C. (1999). Initial teacher education and inclusive schooling. *Support for Learning*, 14(4):169-172.
- Rose, R. (2000). Using classroom support in a primary school: A single case study. *British Journal of Special Education*, 27(4):191-195.
- Rose, R. (2001). Primary school teacher perceptions of the conditions required to include pupils with special educational needs. *Educational Review*, 53(2):147-156.
- Rosenthal, R. & Rosnow, R.L. (1991). *Essentials of behavioural research: methods and data analysis*(2<sup>nd</sup> Edition). Singapore: McGraw-Hill International.
- Salant, P. & Dillman, D.A. (1994). *How to conduct your own survey*. New York, NY: John Wiley & sons.
- Schechtman, Z & Or, A. (1996). Applying counseling methods to challenge teacher beliefs with regard to classroom diversity and mainstreaming: An empirical study. *Teaching and Teacher Education*, 12:137-147.

- Schoeman, M. (1997). *Schools for All: A new approach to what schools are all about*. Lecture presented at the Teacher Information Seminar of the Gauteng Department of Education and the Down Syndrome Association of South Africa, Pretoria, 1-14.
- Schumm, J. & Vaughn, S. (1995). Getting ready for inclusion: Is the stage set? *Learning Disabilities Research and Practice*, 10, 169-170.
- Scruggs, T.E. & Mastropieri, M.A. (1996). *Teacher perceptions of mainstreaming/inclusion, 1958-1995: A research synthesis*. *Exceptional Children*, 63, 59-74.
- SEN Policy Options Steering Group. (1999). *Rethinking support for more inclusive schooling*. United Kingdom: Nasen.
- Sindelar, P. (1995). Full inclusion of learners with disabilities and its implications for teacher education. *Journal of Special Education*, 29, 234-244.
- Slavin, R.E. (1983). Education Review. *Cooperative Learning*. New York: Longman
- Smith, M.G. (2000). Secondary teachers' perceptions toward inclusion of students with severe disabilities. *NASSP Bulletin*. University of Memphis.
- Smith, T.E.C., Polloway, E., Patton, J.R. & Dowdy, C.A. (2004). *Teaching students with special needs in inclusive settings* (4<sup>th</sup> Edition). Boston: Pearson.
- Sommer, R. & Sommer, B.B. (1986). *A practical guide to behavioural research: tools and techniques* (2<sup>nd</sup> Edition). Great Britain: Oxford University Press.

- Soodak, L., Podell, D. & Lehman, L. (1998). Teacher, student and school attributes as predictors of teachers' responses to inclusion. *The Journal of Special Education*, 31, 480-497.
- Swart, E. & Pettipher, R. (2005). A framework for understanding inclusion. In Landsberg, E., Kruger, D. & Nel, N. (eds.) *Addressing Barriers To Learning: A South African Perspective*. Pretoria: Van Schaik.
- Tait, K. & Purdie, N. (2000). Attitudes towards disability: Teacher education for inclusive environments in an Australian university. *International Journal of Disability, Development and Education*, 47(1):25-38.
- Thomas, G., Walker, D. & Webb, J. (1998). *The making of the inclusive school*. London: Routledge.
- Thomson, G.O.B. (1998). Inclusive education- a shifting paradigm. Paper presented at the conference "Towards inclusive education in South Africa", Stellenbosch, South Africa, 6-8 April.
- Thousand, J.S. & Villa, R.A. (1991). Accommodating for greater student variance. In M. Ainscow (Ed.), *Effective schools for all*. London: David Fulton Publishers.
- Topping, K.J. (1988). *The Peer Tutoring Handbook: Promoting co-operative learning*. London: Croom Helm; Cambridge, MA: Brookline Books.
- Unesco (1994). *The Salamanca statement and framework for action on special education*. Paris: Author.
- Villa, R. (1996). Preparing teachers to support inclusion: Pre-service and in-service programs. *Theory Into Practice*, 35 (1), 42-50.

- Vygotsky (1978). *Mind in Society: The development of Higher Psychological Processes*. Cambridge, Massachusetts: Harvard University Press.
- Wade, B. & Moore, M. (1994). Children's early book behaviour. *Education Review*, 48(3) 283-288.
- Wade, S.E. (2000). *Preparing teachers for inclusive education: case pedagogies and curricula for teacher educators*. New Jersey: Lawrence Erlbaum Associates, Publishers.
- Walliman, N. (2001). *Your research project: A step by step guide for the first time researcher*. London: SAGE Publications.
- Watson, J.M. (1996). Children's construction of "fair" representations of one third. *Australian Journal of Early Childhood*, 22(2), 34-38.
- Wearmouth, J., Edwards, G. & Richmond, R. (2000). Teachers' professional development to support inclusive practices. *Journal of In-service Education*, 26:37-48.
- Westwood, P. (1997). Commonsense methods for children with special needs. *Journal of Adolescent and Adult Literacy*, 30:75-79.
- Wilczenski, F.L. (1993). Changes in attitudes toward mainstreaming among undergraduate education students. *Educational Research Quarterly*, 17, 5-17.
- Winzer, M.A. (1998). The inclusion movement and teacher change: Where are the limits? *McGill Journal of Education*, 33, 229-251.
- Wisniewski, L. & Gargiulo, R.M. (1997). Occupational stress and burnout among special educators: a review of the literature. *Journal of Special Education*, 31,3, 325-46.
- Wolfendale, S. (1992). *Primary Schools and Special Needs Policy, Planning and Provision: Special Needs in Ordinary Schools*. Continuum International Publishing.
- Woolfolk, A.E. (1998). *Educational Psychology* (7<sup>th</sup> Edition). USA: Allyn & Bacon.

# APPENDIX A

Navze  
Fonitika Dr BS Cornelissen  
Mibuzo  
Telefoni  
Telefoni (021) 467-2266  
Ifoni  
Faki  
Faki (021) 425-7445  
Ifaki  
Veruyising  
Reference 20080115-0016  
Isalechiso



Wes-Kaap Onderwysdepartement  
Western Cape Education Department  
ISebe leMfundu leNtshona Koloni

Mr Sean September  
38 Bennett Circle  
WORCESTER  
6050

Dear Mr S. September

**RESEARCH PROPOSAL: SUPPORT AND TRAINING OF TEACHERS TO MEET THE DIVERSE NEEDS OF ALL CHILDREN.**

Your application to conduct the above-mentioned research in schools in the Western Cape has been approved subject to the following conditions:

1. Principals, educators and learners are under no obligation to assist you in your investigation.
2. Principals, educators, learners and schools should not be identifiable in any way from the results of the investigation.
3. You make all the arrangements concerning your investigation.
4. Educators' programmes are not to be interrupted.
5. The Study is to be conducted from 22<sup>nd</sup> January 2008 to 29<sup>th</sup> February 2008.
6. No research can be conducted during the fourth term as schools are preparing and finalizing syllabi for examinations (October to December).
7. Should you wish to extend the period of your survey, please contact Dr R. Cornelissen at the contact numbers above quoting the reference number.
8. A photocopy of this letter is submitted to the Principal where the intended research is to be conducted.
9. Your research will be limited to the following schools: Breërivier High, Riverview Primary, Worcester East Primary and Vusizwe Secondary.
10. A brief summary of the content, findings and recommendations is provided to the Director: Education Research.
11. The Department receives a copy of the completed report/dissertation addressed to:  
The Director: Education Research  
Western Cape Education Department  
Private Bag X9114  
CAPE TOWN  
8060

We wish you success in your research.

Kind regards,

for HEAD: EDUCATION  
DATE: 30<sup>th</sup> January 2008

WELKOM AANSOEKERS VAN ONDERSOEKERS IN ALLE AFDDELINGS. WELKOM AANSOEKERS VAN ONDERSOEKERS IN ALLE AFDDELINGS. WELKOM AANSOEKERS VAN ONDERSOEKERS IN ALLE AFDDELINGS.

GRAND CENTRAL TOWERS, LAKE MELENDS-RAAT, PRIVATE BAG 9114, KAAPSTAD 8000  
GRAND CENTRAL TOWERS, LOWER PARLIAMENT STREET, PRIVATE BAG 9114, CAPE TOWN 8000

WFB: <http://wced.wcape.gov.za>

**INBELSENTRUM CALL CENTRE**

INDIENSTREKING SA SALARISNAI RAE EMPLOYMENT AND SALARY QUERIES ☎ 0561 92 33 22  
VENDE FROU SAFE SCHOOLS ☎ 0800 45 45 47

## APPENDIX B

### QUESTIONNAIRE

#### SECTION A

#### BACKGROUND INFORMATION

1. Your gender:

MALE	
FEMALE	

2. Years teaching experience:

(Mark with an X)

0-5	6-10	11+
-----	------	-----

3. Designation:

(Please tick)

Principal	
Dep. Principal	
HOD	
PL 1 Educator	

4. How would you classify  
the location of your school?

Township	
Suburban	
Rural school	
Other	

5. Indicate the duration of formal

Inclusive Education training  
received:

1 week	
2 weeks	
3 weeks	
4 weeks	
More than 4 weeks	

## SECTION B

(Please answer each question as honestly as possible, by making a tick (✓) in the appropriate box).

How would you rate the following	Highly effective	Effective	Somewhat effective	Hardly effective	Not effective
1. The quality of the training you received.					
2. The quantity of work covered during these training sessions.					
3. The relevance of the subject matter covered.					
4. The sufficiency of the training period.					
5. The support from the National Department of Education.					
6. The support from the Provincial Department of Education.					
7. The support of the District(regional) level.					
8. The support from the school based support team.					
9. The adequacy of the skills you acquired in comparison to those colleagues who did not get training.					
10. The quality of the skills imparted to you in preparation for inclusive education.					
11. The relevance of the skills you acquired in preparation for inclusive education.					
12. The contribution of the skills you acquired towards your preparedness to implement inclusive education.					
13. Your general opinion of the training you received.					
14. Your general opinion of the support you received.					
15. Your general opinion of the skills you acquired					
<b>TOTAL</b>					