TRAINING AND SUPPORT PROVIDED TO MAINSTREAM EDUCATORS IN AN INCLUSIVE EDUCATIONAL SETTING

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ABSTRACT

Inclusive Education is very much in its infancy stage in South Africa and therefore a lot of research still needs to be conducted in this area. In an attempt to find answers, many questions are being asked about this topic.

The present study is one of those attempts. It is an effort to investigate what was provided in terms of training and support to mainstream educators in an inclusive educational setting in two schools which participated in the SCOPE Project in the Mpumalanga Department of Education. These educators were all subjected to a two-week training programme before commencement of the project. The researcher embarked on a search to establish whether the educators believed the training and support that they received was effective.

Various studies, both local and abroad, suggest that training and support are the two issues that the majority of mainstream educators are most concerned about, when it comes to the implementation of inclusive education.

The researcher specifically puts aspects like pre-service training, inservice training and continuous professional development (CPD) under the spotlight, with reference to training.

With reference to the issue of support, a closer look is taken at classroom support, professional collaboration and peer support, in order to get a clearer understanding of what is needed in this regard.

Lastly, the researcher also looked at the skills that can act as a "minimum requirement" for the successful implementation of inclusive education in South African schools.

Data were collected through the administration of a questionnaire. The main findings revealed that the majority of educators believed that the training, support and skills they received in preparation for the SCOPE were effective.

The results were quite surprising, given the fact that on an international level, most educators were still mostly concerned about training and support, the very issues under scrutiny in present study. This may be due to the fact that the sample was relatively small. In the same vein the study reveals significant food for thought e.g. integration of pre-service and inservice training programmes, as well as value of continuous professional development. In addition the researcher identify parental involvement and collaboration between special and mainstream schools as key focus areas, especially within the South African context, where the National Department of Education has embarked on a twenty-year roll out plan, for the implementation of inclusive education in all South African schools.
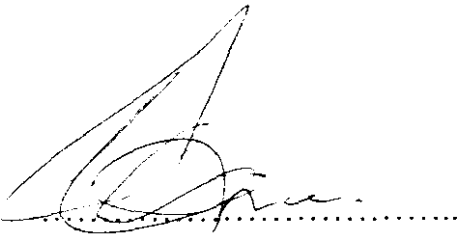
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DECLARATION

I declare that *Training and Support provided to mainstream educators in an Inclusive Educational setting* 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.

Charles Andrew Persence   Date: 30 November 2006

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CHAPTER ONE

INTRODUCTION

1.1 Motivation for the study to be undertaken

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, changing and diverse society (Engelbrecht, 1999:6).

Like many new approaches before, the introduction of inclusive education in South African schools will necessarily bring with it major challenges to all those involved. Key role players such as educators, parents and learners are the ones most likely to be affected either negatively or positively, or both. 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. 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, 1997:3).

A study by Lynas (1999) revealed that the *amount* and *quality* of support is crucial to the success of integration. This support should also be effective.

A previous study on the possible role of special schools in inclusive education in South Africa, reported that inclusive education shows a "vacuum in the training of mainstream educators, which will have to be filled with compulsory training in special education". The study also indicates that the theory of inclusive education emphasizes the importance of sufficient support for the educator and learner in the mainstream school (Hall & Engelbrecht, 1999:231). The question is, will it be practically possible to subject all those educators who are now faced with the implementation of inclusive education (in other words those already in the system!) to vigorous, substantive training in special education? On top of that, there is also an outcry to move away

from concepts such as *"special education"*, let alone training in the subject in the traditional way.

In another study (Hay, Smit & Paulsen, 2001:213) the objective of the investigation was to conduct a "thorough situation analysis" of educator preparedness for inclusive education. The results/findings were to be used by the Department of Education, as well as other stakeholders, to facilitate the successful implementation of inclusive education. The results of this investigation indicate that a huge effort will have to be made by policy makers and provincial education departments to effect a paradigm shift towards inclusion. It appeared as if respondents still think in terms of "past specialized education models" that were utilized in previous eras. This study also revealed that it appears as if the empowerment of educators is neglected in the South African policy documentation on inclusive education.

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

- 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.

Prinsloo (2001:344) found in the study that the most important problem that has to be overcome in the process of implementing the policy of inclusive education is the training and empowerment of teachers to identify and effectively support learners who experience barriers to learning.

From the above information it should be clear that the emphasis for the successful implementation of the inclusive education policy in South African schools is, in no uncertain terms, on training and support of educators/teachers. They happen to be "the

key role-players in determining the quality of implementation of any new education policy (which includes the new policy of inclusion)" (Prinsloo, 2001:214).

Although the studies mentioned above all highlight one central issue, which is training and support, one can also go further and safely say that the following additional factors will also be key in terms of determining success:

- The type of training and support;

- The duration and sustainability of such training and support;

- The quality of training and support

Although it is not always easy to measure quality in the educational system, specifically when it comes to the implementation of new programs, some attempt needs to be made to ensure that certain standards are met and there can be accountability.

The present study will therefore attempt to assess whether training and support provided to educators in three mainstream pilot primary schools, in the Gert Sibande region of the Mpumalanga Education Department, are adequate, in order for such educators to cope with learners who experience barriers to learning in their classrooms. The learners have also been deliberately placed in their classrooms as part of a pilot project.

The importance of this study cannot be overemphasized in as far as it is an attempt to establish whether we have started to address the "vacuum in the training of mainstream school educators". Furthermore the study will assess whether we are taking "the importance of sufficient support for the educator and learner, in the mainstream school. seriously (Hall & Engelbrecht, 1999:231).

1.2 Statement of the problem

The Mpumalanga Department of Education was selected to form part of the South African – Finnish Co – operation Programme in the EducationSector (SCOPE) (Helsinki Consulting Group, 1999).

The main objectives of the project are, amongst other things, introducing Inclusive Education:

- To support and facilitate the pilot mainstream schools in introducing Inclusive Education;

- To develop the capacities of provincial departments and schools in Inclusive education;

- To develop the capacities of teachers in including the learners with "special needs" (barriers) in mainstream classrooms.

The project is managed and services rendered by the Helsinki Consulting Group Ltd. The following phases and time frames are applicable to the project:

(i) Phase 1 – February 2000 to January 2002

(ii) Phase 2 – February 2002 to December 2003

A budget of Euro 5.6 million has been set aside, with all the funds provided by the Department of Foreign Affairs, Finland.

On commencement of the project the following training was provided to the educators in the identified schools:

a) Remedial education and Outcomes based education (OBE) training – 4 weeks duration:

b) Visual Impairment training (Braille) – 1 week duration:

c) Hearing Impairment training (sign language) – 1 week duration

All educators attended a workshop on inclusive education. Other resources like a fax machine and a computer (mainly for administrative purposes) were provided to each of these schools, but no assistance was given where renovations to the school is concerned, for example ramps, changes to classrooms etc (Information provided courtesy of Bouwer, P. 2003).

A number of learners (±5-6 per school) experiencing particular barriers (physical, neurological etc.), were placed in these schools for the purpose of the project.

The research problem can now be stated as follow:

1.2.2   Was the training provided effective, in order for the educators to cope with these "extra" demands that were placed on them?

1.2.2   Are these educators receiving sustainable effective levels of support for the challenges facing them on a day to day basis i.e. in the implementation of the policy of inclusive education?

1.2.3   Do educators exposed to the training programme, differ in terms of their opinion of the value of the skills, for implementation of the SCOPE project?

1.2.4   Do educators believe, in general, that the training, support and skills were effective;

1.2.5   Do these educators also differ according to gender, location and rank with reference to their opinion about the training received, support provided and the skills acquired?

1.2.6   Is there any correlation between the years of teaching experience and the opinion of teachers with regards to training, support and skills?

In addition therefore, it should be stated that this study will attempt to shed some light on where the Department of Education in Mpumalanga is at this stage in terms of readiness for the implementation of the policy of inclusive education on a system wide scale. It is also envisaged that areas of improvement will be identified and/or new areas of training and empowerment opened up.

1.3 Research aims

The research aims arise out of the problem statement and can be stated as follow:

1.3.1   To determine whether the training provided. as part of the SCOPE project. is effective;

1.3.2   To determine whether educators are satisfied with the level of support received from the Department of Education and therefore perceive it as effective;

1.3.3   To determine whether these educators are of the opinion that the skills they acquired were effective for the successful implementation of inclusive education in the pilot schools;

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 mentioned 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 tests for these opinion-based responses of the educators. Similarly the two hypotheses will be based on research aims 5 and 6. whereby the researcher will conduct a t-test. one-way analysis of variance (ANOVA), as well as a Spearman rank correlation. The research assumptions and hypotheses are as follow:

1.4.1   The training provided to educators, as part of the SCOPE project. is effective for the successful implementation of inclusive education in these pilot schools (Research assumption 1);

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

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

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

1.4.5   The educators will not differ in opinion in terms of the following characteristics i.e. gender, location of school and rank (Hypothesis 1);

1.4.6   There is no correlation between years of teaching experience and the rating of educators on the dependent variables of training, support, skills and general (Hypothesis 2).

1.5   Definition of terms

1.5.1 Inclusive educational setting

The term refers to 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 support

This refers to the quality and relevance of training and support that was provided to mainstream educators at the onset of the Scope pilot project.

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 SCOPE

Scope is an acronym for the Co-operation programme between the Department of Education in South Africa and the Ministry of Foreign Affairs in Finland. The duration of this programme is from February 2000 to December 2003.

1.5.5 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 more pro-rata funding than schools for other population groups, which placed them in a much more advantaged position in terms of resources.

1.6   Research Methodology

1.6.1 Research Design

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

Strauss and Corbin (1990:22) view the skilled researcher as a person who "... becomes adept at weaving descriptions, speaker's words, field note quotations and their own interpretations into a rich and believable descriptive narrative". The design will also take the form of a case study in that the objective is to "investigate the dynamics in some single bound system" (Huysamen, 1994). In this case it will be the participants (3 schools) in the Scope pilot project.

1.6.2 Sample

The study sample will consist of two of the three pilot schools in the Gert Sibande region (Mpumalanga Education Department) that forms part of the SCOPE project. This will be an example of purposive sampling (non probability sampling), where the researcher rely on his /her experience, ingenuity and /or previous research findings to deliberately obtain participants in such a manner that the sample obtained may be regarded as representative of the relevant population (Huysamen, 1994). All educators involved with the project will be part of the study.

1.6.3 Research Instrument

The researcher will make use of a questionnaire, which will be disseminated, to research participants for completion. The researcher will conduct the investigation on the spot under natural circumstances (Huysamen, 1994). Like in previous studies on the topic (Hall & Engelbrecht, 1999; Hay, Smit & Paulsen, 2001), the researcher in the present study will make use of the mentioned method of data collection in respect of each of the three research aims.

1.6.4 Administrative procedures/Empirical/Fieldwork

After obtaining permission from the Mpumalanga Department of Education and the principal in the selected school, site visits will be conducted with a view of collecting data.

Like in a previous study (Hall & Engelbrecht, 1999), a quantitative methodology will be employed to analyze the data from the educator responses. This method will be employed for all the aims. The researcher will analyze the data for measures of variability and perform a t-test and a one-way analysis of variance (ANOVA) test.

1.7 Summary

This chapter outlined the need for a study on inclusion in two pilot schools in the Mpumalanga Department of Education and the value of this research, for future inclusive educational initiatives. The chapter emphasized the importance to evaluate the effectiveness of the training and support that were provided to the educators who participated in this pilot project. This chapter defined the problem, aims, hypotheses, terms, methodology and research plan of the study.

The following chapter provides a review of the literature on inclusion and in particular studies on the relationship between training and inclusion, the relationship between support and inclusion and the relationship between skills and inclusion.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter will include an elaboration on the core issues of *training, support, and skills* required for successful implementation of inclusive education in South Africa. In certain instances, broad guidelines are provided on what is understood to be the "minimum requirements" for the successful implementation of inclusive education in such schools.

Engelbrecht, Oswald, Swart and Eloff (2003) maintain in their study that inclusive education is a "fairly new initiative" in South Africa, hence the body of research evidence relating to this topical issue is quite limited in this country. The researcher was therefore forced to synthesise the findings of the limited, available research studies conducted in this country and that from relevant studies conducted abroad, in order to contextualise and inform the research questions, research aims and research process. The lack of empirical evidence that exists in our country should, however not prevent any researcher from exploring this largely "uncharted "territory.

Various authors documented that the main concerns raised by educators, who are confronted with inclusion of learners experiencing barriers to learning into their mainstream classes, relate to training and support (Engelbrecht *et al.*, 2003; Woolfolk, 1998; Creese, Daniels & Norwich, 1997). Questions such as the following are very common amongst the educators under discussion: "Do I have enough training?" "Will I get the support I need from school administrators or specialists?" Creese, et al. (1997) found that many educators feel they do not have sufficient *training and support* "to meet many of the challenges presented by learners with special educational needs (SEN) in their classes". In fact, Ainscow (2000) found in his study that additional training is necessary for educators if they are to acquire the skills and confidence necessary for the management of classroom support. This finding touches at the heart of the three core aims of the present study.

In addition, it should also be noted that effective teaching for exceptional learners does not require a unique set of skills, instead a combination of good teaching practice and sensitivity to all learners is essential.

This chapter will therefore attempt to shed some light on these issues.

2.2 Studies on the relationship between type of training and inclusion

There is no doubt that well trained educators are critical to helping learners in inclusive classrooms. This sentiment by the researcher is supported by various studies, as will be outlined below. The unfortunate part is that many mainstream educators practising today were trained and inducted into the dual system of special and general education. Another vital question that needs to be answered is "what facet of teacher training should receive priority, pre-service training or in-service training?" In addition we need to explore ways of merging the expertise of special education educators with that of their mainstream counterparts into one inclusive education system. A quick response to this matter would be to say that in order to achieve this the two groups need to learn, plan, and share successes and failures together. In this regard, special education educators obviously have a lot more to share than mainstream educators. These and other issues are the focus of this section of the current study.

Kauffman and Hallahan (1995:266) argue that there has been no "massive teacher training" about effective ways to teach learners with disabilities. Similarly, Rose (2001) found that the need for additional training and a concern for lack of personal professional experience was a consistent theme presented by the subjects of his study. This implies that a huge gap exists in this area and it further means that the financial resources of education departments will have to be restructured in order to bridge this gap.

According to Evans, Lunt, Wedell and Dyson (1999:159), 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;

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- 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.

The training and empowerment of educators to identify and effectively support learners who experience barriers to learning, is viewed as the "most important problem" to be overcome by the South African education system (Prinsloo, 2001). The study also mentions that at the *International Special Education Congress 2000 (ISEC 2000)* one of the important problems that were debated and a question that arose was: "*How do we evaluate the effectiveness of inclusive education?*" The researcher would like to include another question, namely: "Is the South African system ready to face this new type of problem (challenge)? This is asked against the backdrop of many educators still struggling to get to grips with the roll out of Outcomes Based education (OBE) in our schools".

Educators should be trained to think and work in a new frame of reference or mindset, which places the focus on the single greatest problem facing the new education dispensation. This is the fact that 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" (Prinsloo, 2001:345). It can therefore be argued that the "new" concept of inclusive education has the potential to further add to this confusion and insecurity, although it is beyond the scope of the current study to actually investigate this.

Another South African study argues that from a special educator's point of view, it appears as if inclusive education shows a "*vacuum*" in the training of mainstream school educators. This gap will have to be filled with compulsory training in special education (Hall & Engelbrecht, 1999:231). The theory of inclusive education emphasises the importance of sufficient support for the educator and learner in the mainstream school. Knowledge and skills should equip educators to deal with learners who are experiencing barriers to learning".

Naicker (Engelbrecht, Green, Naicker & Engelbrecht, 1999) further suggests that, as part of a "strategic implementation plan of the *National Commission on Special Educational Needs and Training (NCSNET) / National Committee on Education Support Services (NCESS)*, human resource development should take place on a massive scale. This will ensure that all personnel are retrained over a ten-year period".

Prinsloo (2001) is of the opinion that there is a need to support educators in the transformation process, which is also internationally accepted. Three models are presented to empower teachers with the knowledge and skills to direct the transformation of schools and establish inclusive education. These models were developed between the period July 2000 to June 2001 at the University of South Africa and the University of Pretoria. These models are:

- a model for educators to assist learners with behavioural problems in the classroom;

- an At – Risk Disk as instrument to enable educators to identify the nature and extent of the learning difficulties of learners;

- A training manual, for educators to assist mildly intellectually disabled learners in the foundation phase.

Prinsloo (2001) concludes by stating that there is " great endeavour in South African educational circles to train and re-train educators to accommodate a wide spectrum of diversity in the inclusive classroom".

Wade (2000) is of the opinion that, in as far as training is concerned, educators can be prepared for collaboration with other educators, resource personnel, special educators, administrators and parents through case teaching. This is a crucial ingredient in creating successful inclusion in schools. The study under discussion further suggests case studies as an "ideally suited" means of preparing educators for inclusive education, by helping them understand the "needs and concerns " of learners and parents.

The current study will attempt to investigate whether the aforementioned principles and guidelines were applied and even taken into consideration, as part of the SCOPE project in the Mpumalanga Department of Education.

The following subdivisions, relating to teacher training, needs to be discussed and addressed, otherwise there will be major gaps in the successful implementation of inclusive education:

2.2.1 Pre-service training

Research reveals that inclusion would fail unless significant changes are made to the current structure and content of initial teacher training, also known as pre-service training (Garner, 1996, 2000; Bishop & Jones, 2002). Mittler (Bishop & Jones, 2002) recommends that pre-service training be evaluated in order to continually improve the preparation of the educators of "tomorrow". This will ensure that they feel better equipped to meet the educational needs of all children. There is common agreement that courses should also focus on issues related to attitudes, feelings, and perceptions. Student educators should be able to interact with all learners in a supportive, positive and reflective way and this in turn will ensure the educators of tomorrow have some understanding of inclusive teaching and inclusive schools. This may help them to become more fully prepared to meet positively the developing demands of their future teaching roles.

The above research literature poses a major challenge to institutions of higher learning, which is to incorporate well balanced modules of inclusive education into their existing educational courses. This further calls for excellent quality assurance processes to ensure that such modules do not become "watered down, add on" modules that's not going to meet the challenges out there in the field of education.

Roach (1995) cautions against an overemphasis on pre-service training. but instead suggests a focus on site visits, training relating to problem solving, curriculum adaptation, and training dealing with the change process.

2.2.2 In-service training (INSET)

Smith (2000) found in a study that 85 percent of the total respondents thought that the inclusion of learners with severe disabilities in their neighbourhood schools would necessitate retraining of educators through in-service training programmes. In the same study 83 percent of respondents felt strongly that mainstream (regular) educators lacked sufficient training to teach learners with severe disabilities, thereby further

emphasising the need for comprehensive INSET programmes. These should include, but is definitely not limited to, topics such as, individualised teaching methods, task analysis of skills and alternative assessment techniques. In addition training on new curriculum ideas and emergency medical techniques is also needed. To Lipsky and Gartner (1996), the most successful training is likely to occur in school teams who have had some experience of working with learners with special educational needs and who can thereby focus upon these learners when undertaking training. Educators should preferably be part of the planning process of such INSET programmes to make it more viable.

The findings of this study strongly suggest that the severity of a disability affect the mainstream educators' opinion on inclusion. This view is strongly supported by the findings of a study by Forlin (1995), that also suggests that strong positive belief of educators and successful implementation of inclusive education are intertwined.

2.2.3 Continuous Professional Development (CPD)

The success of any inclusive education programme will also depend on the efforts that are put into making it possible for educators to continue to develop their skills and expertise. A major challenge will also be to develop a points system for educators, similar to that used by the Health Professions Council of South Africa (HPCSA), for health practitioners registered under its auspices. This will obviously have financial implications for any education authority and they will need to plan accordingly, on an annual basis. Swart and Pettipher (2005) are of the view that professional development should "prepare educators for collaboration and support", something that will be covered in detail in the next section.

2.3 Studies on the relationship between type of support and inclusion

This section will provide the theoretical basis for the second research aim that deals with the issue of support, which forms the foundation for successful implementation of inclusive education. In the South African context, with its wide diversity, the issue of support becomes very complicated. One thing is certain and that is that we will have to "dig deep", in order to make inclusion work in our schools, where all learners will feel accepted and supported on an equal footing. The researcher will now attempt to unpack the key issues relating to support.

Prinsloo (2001) referred to a statement by the Centre for the Studies of Inclusive Education (CSIE) 1989, which read as follow:" *Inclusive education without support is not inclusion: it is dumping"*. This statement forms the basis on which this section of the current chapter will focus. The researcher is of the view that without sufficient and effective types of support to mainstream educators, teaching learners experiencing barriers to learning, inclusive education will be a dismal failure. In the South African context, various policies and subsequent pieces of legislation have emerged, as part of the development of an inclusive education and training system. These will be discussed in detail below to show how the whole roll out of inclusive education is envisaged in this country.

The NCSNET/NCESS report and emerging policy promote a two – prong, three- tier approach to support to schools and other educational institutions (Engelbrecht *et al.*, 1999; Lazarus & Lomofsky, 2001). The two-prong approach includes a focus on:

- Interventions aimed at facilitating transformation of the institutions and curriculum through institutional and curriculum development initiatives to address the diverse needs of the learner population and barriers to learning and development in a preventative and health promoting way;

- Additional support that will be required by some learners either throughout or at some point in their learning journey e.g. counselling support, career guidance, specific learning support, social interventions, assistive devices, etc.

The three-tier approach comprises:

- competencies of all sections of national and provincial departments to address diversity and barriers to learning and development, providing the framework for service delivery at district and learning site level;

- district based support teams with the primary responsibility of developing the capacity of learning sites to understand and address diversity and barriers to learning and development;

- School based support teams with the responsibility of managing the process of addressing barriers to learning and development at local level.

The following aims and principles are envisaged through this support provision:

- There is a reflection of some commitment to an integrated approach which draws on all relevant resources to understand and address these barriers;

- The presence of a community based approach which focuses on drawing on local and indigenous resources in the process of providing support is very central;

- There is a general understanding of problems and their solutions in a "systems" framework which emphasises the need for system transformation (e.g. institutional and curriculum development);

- It envisages a strong focus on prevention and health promotion.

The current research will investigate whether the aforementioned aims, principles, and broad guidelines were factored in as part of the SCOPE project that was conducted in the Mpumalanga Department of Education.

The community - based approach is regarded as a central feature of the support system envisaged for South Africa. It emphasises the role of parents, volunteers, non-government organisations, natural support systems, and other community resources in providing support to schools and other sites of learning. Human and material resources between schools will have to be shared. Utilisation of professional support services from district teams and other government departments (e.g. health, welfare) are also included – intersectoral collaboration at district and site level to facilitate holistic understanding of problems and challenges (Engelbrecht et al., 1999).

The Special Educational Needs Policy Options Group (United Kingdom, 1999:1) in their Policy Paper 1, had the following contribution to make to the hot debate around Inclusive Education and support:

- the path to successful inclusion is a process, rather than something that can happen overnight;

- there appears to be great confusion about how successful support for inclusion might be measured;

- support for inclusive schooling needs to take on board the fact that there may be conflicts about the levels of resource allocation that schools and support providers consider appropriate.

In addition there will also be lots of resistance and pessimism and it should be noted that successful support should be directed at achieving mainstream ownership of the learner, but without an over-dependence on outside resources to achieve this.

Support needs to be capable of making teaching methods and approaches accessible to "ordinary educators", parents and learning support assistants, rather than restricting knowledge and skills to a small number of specialists. More systems of support should be developed within schools to ensure needs are met- this is a fully inclusive school, but in reality it is not like that.

The issue of support will now be further subdivided into the following areas, for the purpose of the present study:

2.3.1 Classroom support

The first level of support will always need to be rendered in the classroom where the learner experiencing barriers to learning and development spent the bulk of his/her learning time. This is also the case in the present study, where a number of learners, experiencing such barriers, were deliberately placed in the mainstream classrooms. This implies that in order for the educator to provide effective support to learners, he/she should receive the same from the district level.

In a single case study, Rose (2000) suggests that the provision of effective classroom support is a "complex issue which requires careful consideration by schools". The findings of the study recommend the appointment of a Learning Support Assistant (LSA) in each class, to assist the educator with those learners having special educational needs. He cautions against the allocation of a LSA to a specific learner with special educational needs, because this may lead to the creation of dependency and the denial of opportunities to develop independent learning skills.

Mainstreaming – sometimes wrongfully perceived as "inclusion" – allows that students with disabilities should be taught on a "stay put" basis in general education

classrooms. It is widely accepted that "stay put" placement should be supported through some kind of teacher collaboration (Chaote, 1997). In all probability, educators will need to refine existing classroom teaching skills and develop new ones in order to meet the professional and ethical challenges we will face as we enter the 21st century.

That general educators are reluctant to accept students classified as disabled in their classrooms is understandable, because few teachers have received *specialised training* at the pre-service level. This had the adverse effect that their ability to work with special students has been seriously tested.

Discussion among professionals has created strong sentiment for the need for additional training, instructional resources, and technical assistance to ensure *"equality of educational opportunity"* for students with disabilities in general education classes.

Certain studies indicate that general classroom teachers who express negative views toward mainstreaming often "fell ill prepared and unsupported in that effort" (Chaote, 1997). This viewpoint is supported by Hardman (Woolfolk, 1998) who argues like Rose (2000), that "regular educators are unprepared, unsupported and unable to handle all these challenges at once. The idea that extra support and consultation will be provided is good in theory, but will it actually come to pass in practice?" It is precisely these type of questions that make research studies such as this one all the more important, in order to find some answers.

In a study on teacher perceptions of inclusion, Mastropieri and Scruggs (Smith, Polloway, Patton & Dowdy, 2004) reveals that nearly two-thirds of general education classroom educators support the concept of inclusion. However, when it comes to willingness to teach learners with disabilities, many expressed concerns. This response was affected by type of disability and perceived impact on the educator. In the study only 33% felt they had sufficient time, expertise, training and resources (material support and support personnel) to enable them to work successfully with learners with special needs. The perception of parents is also of a mixed nature, ranging from total support to complete opposition.

Perhaps the greatest challenge is changing an educational system that presents great barriers to inclusion, because educators' perceptions, attitudes, and opportunities for

collaboration are directly related to the success of inclusion. The next section will elaborate more on the issue of collaboration.

2.3.2 Professional collaboration as a means of support

The establishment of excellent working partnerships among all involved in working with students experiencing barriers to learning is essential for constructive collaboration. Collaboration, in this sense, involves co-operation, effective communication, shared problem- solving, planning, and finding solutions (Mastropieri & Scruggs, 2004:29).

The authors further mention the establishment of the so called *"pre-referral intervention team"*. This structure is suppose to serve the same function as the School Based Support Team (SBST) or Institutional Level Support Team (ILST), as advocated by the Department of Education (South Africa) in it's White Paper No. 6, on Special Needs Education. Other terminology used, to describe these teams are multidisciplinary teams, child study teams, general education assistance teams, teacher assistance teams and as of late, the institutional level support team. The latter was invented to cover the whole spectrum of educational institutions, beyond the school setting.

The core function of this team, no matter what it is called, is to "determine the need for educational interventions to assist individual students who are struggling to succeed at school" (Mastropieri & Scruggs, 2004:34).

Effective communication is an important prerequisite for successful problem solving and efficiency of these teams.

Collaboration should also take place with paraprofessionals or specialised aids, because this is becoming more common in today's schools. Paraprofessionals may be aides to special education educators, specialised aides for learners with disabilities or general aides for educators within a school. They assume a variety of roles and responsibilities, including record keeping, supervising, monitoring seatwork, classroom behaviour, feeding, toilet-training and providing instruction (Mastropieri & Scruggs, 2004:54).

The role and involvement of the parent is equally important if we want to successfully support the learner experiencing barriers to learning. Effective communication should therefore take place between educators and parents throughout.

Weber (Smith *et al.*, 2004) identified five essential features that characterise successful inclusion of learners with special needs. They include a sense of community and social acceptance, appreciation of learner diversity, attention to curriculum needs, effective management and instruction, personnel support and collaboration. Several factors controlled by educators are essential to establish a successful inclusive setting namely, educator attitude, educator expectations, educator competence, educator collaborative skills, and educator support.

Table 2.1 Types of collaborative efforts

APPROACH	NATURE OF CONTACT WITH STUDENT	DESCRIPTION
Collaboration-Consultation	Indirect	General education educator requests the services of the special education educator (i.e. consultant) to help generate ideas for addressing an ongoing situation. Interactive approach.
Peers Support Systems	Indirect	Two general education educators work together to identify effective solutions to classroom situations. The approach emphasizes analyzing the problem situation and developing potential solutions
Educator Assistance teams	Indirect	Teams provide support to general education educators. Made up of core members plus the educator seeking assistance, it emphasizes analyzing the problem situation and developing potential solutions.
Co – Teaching	Direct	General and special education educators work together in providing direct service to learners. Employing joint planning and teaching, the approach emphasizes the joint responsibilities of instruction.

Adapted from *Effective Inclusion Practices and Professional Collaboration* by Smith *et al.* (2004:44).

2.3.3 Peer support

Learners play a critical role in the success of inclusion. They must achieve a level of interaction that leads to classroom communities where peer understanding and support are the norm. In other words, there should be a mutual acceptance and understanding of diversity.

The message that is spread should always be one where it is emphasized that school is a place where everyone belongs and is cared for, will get support and where everyone has something to contribute (Smith *et al.*, 2004). If we fail to adhere to the aforementioned facts, we will end up with what Hay (2003) stated in his study that "rendering support within an old paradigm will in effect be equal to no support at all. Did the learners in the present study play this critical or any other role for that matter as a means of support? Did they try to make these learners, who were placed in their classes as part of the pilot project, feel welcome and supported?

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

The one area of inclusive education that has not been extensively explored by past researchers relates to a question of: "What are the typical skills that educators working in an inclusive educational setting should possess?" Another question that can be asked is: "Should these skills be of a generic nature or should they be situation or context specific?" Swart and Pettipher (2005) suggest that educators acquire a "set of instructional and technical skills to work with the needs of diverse learners". This still doesn't give us a lot to work with, because the specific skills that's required needs to be clearly identified.

The current research will attempt to elaborate on available literature in this regard and provide some perspective on this vital aspect. The researcher hopes that the present study can establish what skills the participants acquired as part of the SCOPE project. In addition, it wants to ascertain whether these acquired skills differ from those educators who were not part of the project. Some of the literature will now be dissected in attempt to find some of the underlying theory.

Certain researchers suggest 'practical skills and a critical understanding of common stereotypes and prejudices related to disability" (Engelbrecht *et al.*, 1999; Swart & Pettipher, 2005), whilst another, Hay (2003) identified skills of a more ecosystemic nature. The researcher would, as a logical next step, like to tabulate the specific skills as identified by Hay (2003), as it is believed that these skills are crucial for educators and education support services personnel:

- excellent skills to work with learners on an individual basis as well as group basis;

- outstanding skills to work with and influence adults involved in learners' lives;

- social - psychological knowledge and skills as well as multicultural sensitivity;

- a very good educational background is essential – preferably from inclusive class-room – in order to provide workable strategies to the educators;

- every educator should have knowledge and skills to influence the systems which surrounds learners;

- basic knowledge and skills of organizational development, as well as whole school functioning are also brought into the equation;

- schooled in ecosystemic, as well as medical model and have flexible outlook re-garding diagnosis and problem formulation;

- a caring and considerate attitude towards diversity and the knowledge and skills to practice tolerance and respect (Hay, 2003:136).

The above information is just the tip of the iceberg in as far as the needs of the inclusive school are concerned. The researcher is of the viewpoint that each educational setting will have to do its own needs analysis to identify the specific skills needed to address the barriers to learning of it's learners.

In the event that we should fail to deal with the aforementioned issues, then we'll definitely fail to arrive at a "connective pedagogy" as a skill (Corbett, 2001). The latter emphasizes that this skill needs to be mastered by educators in our schools, with a strong emphasis on "school culture, school policy and school practice". The researcher tends to agree with this finding, because if there's no connection between educator and learner, then it can safely be argued that in such case no effective teaching and learning actually takes place.

There is another school of thought, by Smith *et al.* (2004), who defined skills more in terms of the "instructional needs" of learners with special needs. They argue that teaching all learners the same way will not be effective for many learners with special needs. It is not very difficult to align oneself with this position, as it is common knowledge that in each classroom, special or mainstream, provision should be made for diversity and as such some form of differentiation should be applied. Many educators who were trained in the era prior to the introduction of outcomes based education in South Africa, should be highly skilled in this area. The challenge obviously is for educators to make the paradigm shift and now apply these skills in an inclusive educational setting.

There is a strong argument in favour of the educator as facilitator in the classroom. The counter-argument to this would be how much skills development is needed and at what cost, in order to meet the needs of learners experiencing barriers to learning. The former viewpoint is clearly in support of the notion of incorporating all learners into the system as smoothly as possible. A good example would be to organise activities in such a way that teamwork and co-operation is encouraged and instilled.

The authors further suggest that friendship facilitation should form an integral part of both special and general education educators' roles. Group activities, pairing students for various tasks, seating arrangements, buddy systems are ways to enhance this. The latter group of teaching strategies already forms part of the outcomes based education philosophy.

The same writers also support the idea that educators should be more practical when it comes to matching individual needs with sound instructional practices. Training in management techniques, instructional strategies and curriculum adaptation tactics is of utmost importance. Topics such as social skills, self-determination, learning strategies and study skills needs to be included in training programmes (Smith *et al.*, 2004:40).

How is the above literature relevant to the present study? The researcher wants to establish whether the participants in the current study acquired the skills as suggested by various researchers, either prior to or during the course of the execution of the SCOPE project in the Mpumalanga Education Department.

Do we support the viewpoint of Woolfolk (1998), that suggests that effective teaching is not about a unique set of skills, but rather a combination of good teaching practices and sensitivity to all learners? Will this viewpoint be more feasible as a strategy in the South African education system, with all its cultural diversity?

On a local level, academics such as Lazarus, Daniels and Engelbrecht in Engelbrecht *et al.* (1999) emphasises the development of personal skills in order to build the health promoting school. They state that this would necessarily include a programme of staff development, parent development, as well as life-skills education for learners.

The same authors also suggest that an effective district based support team should have a range of skills, which will include specialised skills as well as more generic skills, which are relevant to addressing barriers to learning and development.

The common thread in all the arguments in this section is creative problem solving, innovative thinking, a practical, hands - on kind of approach and most important, teamwork.

The researcher is of the view that theory without a blueprint for practical implementation will surely lead to failure.

2.5 Summary

The current chapter attempted to highlight the minimum requirements for the successful implementation of inclusive education in our schools. These included the issues of training, support, and skills needed. It further explored professional collaboration as a factor and the researcher would like to emphasise that this is, in his mind, the single most important issue that all role players have to take into consideration for successful inclusion.

The next chapter is concerned with the method followed in the study. The research design, method of sampling and the research instrument are defined. Administrative procedures in carrying out the research are discussed and the methods of data analysis explained.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The previous chapter dealt with underlying theoretical perspectives that serve to inform current debate around the whole notion of inclusive education and more specifically it unpacked the key issues of training and support to educators.

There is a distinct difference between research design and research methodology (Mouton, 2001). The former focuses on the "end product i.e. what kind of study is being planned", whilst the latter focuses on "the research process i.e. the tools and procedures that will be utilised.

The current chapter will deal with both processes i.e. the "plan or blueprint" of how the researcher intended to conduct the research, in line with the research aims. Furthermore, it incorporates issues around the systematic, methodical and accurate execution of the research design.

The chapter presents the design and methodology of the study that was undertaken by the researcher in addressing the research problem. This chapter expatiates on:

- Research design

- Participants and sampling procedures

- Collection of data (including discussion of questionnaire)

- Processing survey data and

- Analysis of data.

3.2 Research design

Research design can be defined as "a process of creating an empirical test to support or refute a knowledge claim" (Borg & Gall, 1989:324). The type of design used is informed by the worldview of the researcher, the nature of the research problem, the question it raises and the product desired. The research design of this study may be described as a descriptive study.

Descriptive research can be described as "an investigatory focus that tends to have as it's goal the careful mapping out of a situation or set of events in order to describe what is happening behaviorally" (Rosenthal & Rosnow, 1991:10). The key objective is to come up with suggestions as to what factors contributed to a certain outcome or course of action, be it negative or positive. In the present study it is appropriate to regard such as a descriptive study, as it is the objective of the researcher to also investigate and describe the training and support provided to mainstream educators in two pilot schools. The main focus will be on the opinions of the educators who participated in the SCOPE project and to determine whether they regarded their preparation for such project as effective and this will be measured on four levels i.e. training, support, skills and a general opinion.

Lovell and Lawson in (Behr, 1998) define *descriptive research* as "concerned with conditions that exist, practices that prevail, beliefs and attitudes that are held, processes that are ongoing and trends that are developing".

Most of the recent studies on inclusive education use this type of research design, as the map of inclusion has not been finalised or clearly laid out, both locally and abroad (Fielding-Barnsley, 2005; Engelbrecht, Oswald, Swart & Eloff, 2003; Bishop & Jones, 2002; Kyriakides, Demetriou & Charalambous, 2006).

The unit of analysis refers to the "*what*" of the study: what "object", "phenomenon", "entity", "process" or "event" the researcher is interested in investigating (Mouton, 2001:51). The unit of analysis of this study is the educators of two pilot inclusive schools in the Mpumalanga Department of Education. "... Whenever (you) study human behaviour, historical or social programmes ... (you are) ... busy with empirical research" (Mouton, 2001:52). In the light of the aforementioned facts it will be correct to argue that the current study may be regarded as a descriptive case study.

because the investigation focused on a single pilot project, which consisted of two schools, one from the township and one suburban (Huysamen, 1994; Tait & Purdie, 2000; Fielding-Barnsley, 2005).

3.3 Participants and sampling procedures

3.3.1 Sampling

Although probability sampling is necessary for generalisation to the 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, 1986:198).

The choice of a *purposive or opportunistic sample* was dictated by the fact that the participants were "accidentally" based in two pre-selected, pilot schools, which will be elaborated on in the next paragraph. Selection of such a preferred sample is one in which individuals, thought to be most important or relevant to the issue studied, are targeted for the research and has been employed by a few other researchers (Bothma, Gravett & Swart, 2000; Mukherjee, Lightfoot & Sloper, 2000; Hay, Smit & Paulsen, 2001; Bishop & Jones, 2002; Engelbrecht *et al.*, 2003; Fielding-Barnsley, 2005).

A total of 55 educators therefore participated in the study, 30 from a township school and 25 from a suburban, ex-model C school. These educators all received 2 weeks of training prior to the commencement of the SCOPE project. The aforementioned information is indicative of the fact that this was a non-probability, purposive sample. The advantage of this type of sample is it is less complicated and more economical, in terms of finance and time (Huysamen, 1994:44).

The fact that this study focuses on the SCOPE pilot study, in the Mpumalanga Department of Education, further underscores the usefulness of selecting the sample under discussion.

3.4 Research Instrument

3.4.1 The questionnaire

"An *ideal questionnaire possesses the same properties as a good law"* (Cohen & Manion, 1995:92).

With the aforementioned quotation in mind, the researcher decided on a structured, self-administered questionnaire *(Appendix B)*, because it was felt that this 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).

The main features of a questionnaire include its impersonality, anonymity and the fact that it has no geographical limitations with regard to location of respondents (Walliman, 2001).

The issue of anonymity is particularly important, in that it allows for potentially embarrassing questions to be asked with a fair chance of getting a true reply. The measurement instrument also allows respondents to check facts and unravel individual questions, which in turn lead to more accurate information.

3.4.2 Questionnaire construction

A 17 item Likert scale was developed by the researcher and the participants were required to provide responses ranging from *highly effective (a weight of 5 was assigned to such a response)* to *Not effective (a weight of 1 was given to such a response)* for each item (Forlin, Douglas & Hattie, 1996; Smith, 2000; Tait & Purdie, 2000; Hay, Smit & Paulsen, 2001; Engelbrecht *et al.*, 2003).

The questionnaire consisted of two parts. The first part focused on background information about the participant. The second part focused on the actual knowledge of the individual. Refer to Appendix B for an example of the questionnaire. The Likert type response format required educators to place a tick next to each item in the relevant box column of their choice (Forlin *et al.*, 1996; Tait & Purdie, 2000).

The research instrument administered in the current 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 coefficient.

thereby providing for internal consistency of the 17 items in the Likert-type rating scale. In terms of the 5 items that made up the training scale, the Cronbach's Alpha turned out to be 0,710, which indicates high reliability. Similarly the 4 items of the support scale, the 5 items of the skills scale and the 3 items of the general scale revealed high reliability coefficients, ranging from 0.806 to 0,866 respectively. This high internal consistency is indicative of the fact that the items in the research instrument were well balanced.

The researcher took special care in applying certain principles with construction of the questionnaire. This included amongst other things the following:

- The language used in the questionnaire was kept as simple as possible;

- Short questions were used;

- Questions were asked in such a way that the responses didn't pose any form of embarrassment to the individual;

- Each question was checked for a double-barrelled structure (a question consisting of two or more questions joined together);

- Negative questions were avoided (a question is posed in a negative rather than in a positive form);

- Care was taken to avoid leading or biased questions (a question which points the respondent to a certain answer);

- The use of jargon, slang or abbreviations were avoided in items;

- Research has shown that the length of the questionnaire or test has a direct and often negative impact on the quality of the responses and this was avoided in the present study;

- The questionnaire was not too suggestive or too non-stimulating, especially with reference to choices;

- There should be a balance in the types of responses the researcher wants to elicit in this case responses ranging from *"highly effective "* to *"not effective"* were included;

- The questions were asked in such a way so as to allay suspicion on the part of the respondent concerning hidden purposes in the questionnaire (Mouton, 2001:104).

Mouton (2001:103) also warns against fictitious constructs, which occurs when researchers sometimes measure constructs or attitudes that do not exist, e.g. asking people about matters of which they have no knowledge. In the opinion of the researcher the questionnaire under discussion adhered to every single prerequisite as outlined by experts on the topic.

Questions in a questionnaire could either be open-ended or close-ended. Open-ended questions are those which do not limit the nature of the response in any way (Borg & Gall, 1989:428). The response to an open-ended question is infinitely wide and should be taken into account when planning the data analysis. Such questions are usually used in focused and in-depth questionnaires and interviews, with the added burden of it being time consuming and expensive in terms of data analysing. The close-ended question provides a "... range of possible responses to a question (and) is completely determined by the researcher" (Borg & Gall, 1989:428). All that is required from the respondent is to select one response from a range of possible answers. Close-ended questions are ideal for collecting straightforward factual information such as particulars of the sex, age, or the marital status of a respondent.

The researcher is aware of the fact that each method he used in this study is limited in some way, but at the same time they also have benefits. The self-administered questionnaire has a few advantages and weaknesses. Some of the advantages of this method are that:

- the researcher can collect information from a fairly large number of people in one go – in this study the number of participants were fifty four (54) in total;

- it was inexpensive to collect the data – the researcher was able to drive personally to the schools to drop off and collect the questionnaires;

- the respondent to remained anonymous;

- the return of the completed questionnaires were very high – in fact in this case it was 100%;

- it produced undisguised descriptive information; and

- all respondents were presented with the same questions (standardised questions).

Some of the limitations of the self-administered questionnaires are that:

- the researcher needed to take time to think about the purpose of the questionnaire and drafting of questions and piloting;

- the researcher needed to take care to make questions clear and even try and ensure that the responses are not superficial by balancing items; added to this is the fact that it is more difficult to get at explanations as set variables are collected (Mouton, 2001).

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

After formally obtaining permission from the Mpumalanga Department of Education in South Africa *(See Appendix A)*, the researcher approached the principals of two of the pilot schools that formed part of the SCOPE project. These schools were Umsebe Primary school, where all 30 educators (6 male + 24 female) participated and Laerskool Standerton, where 25 educators (21 female + 4 male) took part. The principals from both schools, who also participated in the study, acted as facilitators in the process of data collection. The researcher was of the opinion that this step would ensure the prompt return of the completed questionnaires (Fielding-Barnsley, 2005).

The researcher took several steps in order to ensure that the collected data could be analysed in a sensible manner, something that is crucial in an empirical study.

The questionnaire was delivered to the two schools personally by the researcher during the first week of June 2004 and collected at the end of that same month in the

same way. The principals of the two schools took responsibility for the completion and collection of the questionnaires (Fielding-Barnsley, 2005).

The researcher is aware of the fact that each method he used in this study is limited in some way, but at the same time they also have benefits. The self-administered questionnaire has a few advantages and weaknesses. Some of the advantages of this method are that:

- the researcher can collect information from a fairly large number of people in one go;

- it is inexpensive to collect the data;

- it allows the respondent to stay anonymous;

- unlike the low return rates of postal questionnaires, the self-administered questionnaires offer the possibility of a high return rate;

- it is good at producing undisguised descriptive information; and

- all respondents are presented with the same questions (standardised questions).

Some of the limitations of the self-administered questionnaires are that:

- time is needed to think about the purpose of the questionnaire, drafting questions and piloting;

- care is needed to make questions clear and even if it is clear the responses can be superficial and it is more difficult to get at explanations as set variables are collected.

Two very important processes that need to be done before any researcher can proceed to the analysis of data entail *editing* and *coding* (Cohen & Manion, 1995:101). Editing is an exercise whereby the questionnaires are checked for any errors or mistakes. During editing three tasks needs to be included namely, checking for *completeness*, *accuracy* and *uniformity*.

Coding, on the other hand, actively seeks to assist with reducing the data to a suitable format for analysis and entails assigning a code number to each answer of a questionnaire item. The fact that the questionnaire in the current study consisted mainly of closed ended questions, assisted a great deal with the post coding exercise i.e. assigning of codes after the questionnaire has been administered. The coding was done with assistance of the SPSS package in line with the three research aims.

The measuring instrument used in this study was to confirm or validate the data gained through the literature review. The researcher introduced him to the educators at the two pilot schools and explained the research topic and the aim of the study to them. As indicated previously the questionnaires were not mailed and no telephonic interviews were held. The questionnaires were delivered personally and collected two weeks later personally. The advantage was that the return rate of questionnaires was high. The self-administered questionnaire (survey) was used in this study, in other words the respondents were required to fill it in themselves.

3.6   Scoring of the research instrument

The 17 questions were arranged in a specific sequence, in accordance with the research aims. This can be further broken down into 5 questions focusing on *training (measuring research aim 1)*, 4 questions on *support (measuring research aim 2)*, 5 questions on *skills (measuring research aim 3)* and 3 *general impression* questions. The items were designed such that it would make it possible for the respondents to answer honestly without fear of embarrassment. Reliability of these items were measured by using Cronbach's alpha coefficient, as was discussed earlier in the chapter (Engelbrecht *et al.*, 2003).

For the purpose of this study the researcher used closed-ended questions in a checklist format. The section where their knowledge was tested gave the respondents five options, namely *highly effective, effective, somewhat effective, hardly effective and not effective*. During the analysis stage these categories were converted to numbers, ranging from 5, 4, 3, 2 and 1 respectively. The categories of *highly effective* and *effective* were added together to form one category namely, **effective.** In the same way the categories of *not effective* and *hardly effective* were combined to form the **not effective** category. The *somewhat effective* category remained unchanged.

According to Mouton (2001:108) the aim of data analysis is:

- to understand the various constitutive elements of one's data through an inspection of the relationships between concepts, constructs or variables; and

- to see whether there are any patterns or trends that can be identified or isolated;

- to establish themes in the data.

A quantitative approach is one in which "the investigator primarily uses post-positivist claims for developing knowledge (i.e., cause and effect thinking, reduction to specific variables and hypotheses and questions, use of measurement and observation and the test of theories). It further employs strategies of inquiry such as experiments and surveys and collects data on predetermined instruments that yield statistical data" (Creswell, 2003:18).

This study's quantitative data were expressed in the form of ordinal scale variables and presented in tables. The data were organised in the form of tables. Descriptive statistical techniques are used to summarise characteristics of sample data. This implies that we want to try and give meaning or make sense of collected data. The reason why we analyse data is to "measure, make comparisons, examine relationships, forecast, test hypotheses, construct concepts and theories, explore, control and explain phenomena" (Walliman, 2001:253). In this study it was attempted to make generalisations from a small sample to the larger population of educators. The descriptive statistics were utilised to describe research aims 1, 2 and 3.

The data were analysed by means of a computer statistical package called Statistical Package for the Social Sciences (SPSS). Through this analysis the researcher worked out measures of central tendency, measures of variability and measures of relationship (correlation coefficients).

The researcher calculated a *t-test* of significance between two means for independent groups, to establish whether they are samples of the same population or not. This is normally done where $n \leq 30$ (Dawson & Trapp. 2004). This will be calculated for research aim 4, which has as it's objective to determine whether there is a significant difference in the responses of participants in terms of gender and location.

In addition, and still concentrating on research aim 4, the researcher conducted the *one way analysis of variance (ANOVA)*, given the fact that the study consists of two 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"* (Dawson & Trapp, 2004). The one way ANOVA included the independent variable of rank as part of the analysis, in addition to the independent variables of gender and location (Behr, 1988; Engelbrecht *et al.*, 2003; Tait & Purdie, 2000; Fielding-Barnsley, 2005). The purpose of this step was to ascertain whether a correlation exists between the rank and the response of the participant, with regards to research aim 4.

In terms of research aim 5, the researcher will calculate the Spearman rank 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

The present chapter dealt with the research methodology and research design. The researcher also presented the participants and the sampling procedures, with specific mention of the fact that this was a purposive sample, because the participants "accidentally" formed part of the pilot study. A detailed discussion of the research instrument and it's construction was provided, including information on how the items were evaluated for internal consistency using Cronbach's Alpha.

Furthermore the researcher outlined the procedures for the administration of the research instrument and provided information on how confounding variables were controlled. The latter section included a brief discussion on editing and coding of research data.

Lastly, the scoring of the research instrument was discussed in great detail and this section also contained information on the calculation of the t-test and one way analysis of variance.

The researcher needs to mention that the data for the study was collected almost towards the second half of the time frame set out for the pilot study, hence it was not possible to conduct a test-retest as part of the research.

In the next chapter the presentation and detailed analysis of the data collected is undertaken, showing how the findings on each and every question contribute towards significant conclusions in the study.

CHAPTER 4

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

The previous chapter dealt with the research design and methodology, i.e. the blueprint on how the study was conducted. The current chapter presents the research results, as well as provides 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 study sample and it's characteristics

The sample consisted of 54 educators who were stationed at two of the three pilot schools that formed part of the SCOPE project in the Gert Sibande region of Mpumalanga Department of Education. The educators, who were purposefully selected, belong to two schools, namely Standerton Primary School (Afrikaans medium school) and Umsebe Primary school. The sample consisted of nine males and forty-five female participants.

Fig 4.1: Gender spread of participants
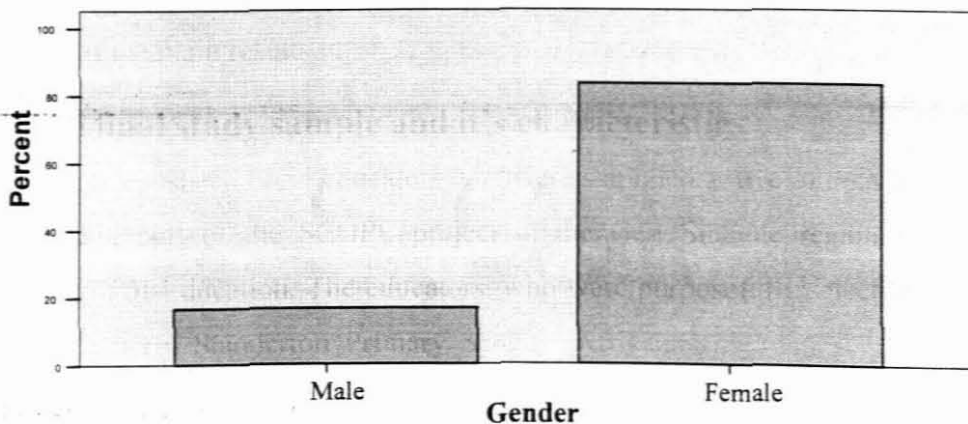
With regard to the location of the schools the sample was further divided into a 56 per cent township group (Umsebe) and a 44 per cent suburban group (Standerton Primary School)

Fig.4.2: Distribution of sample according to location of school
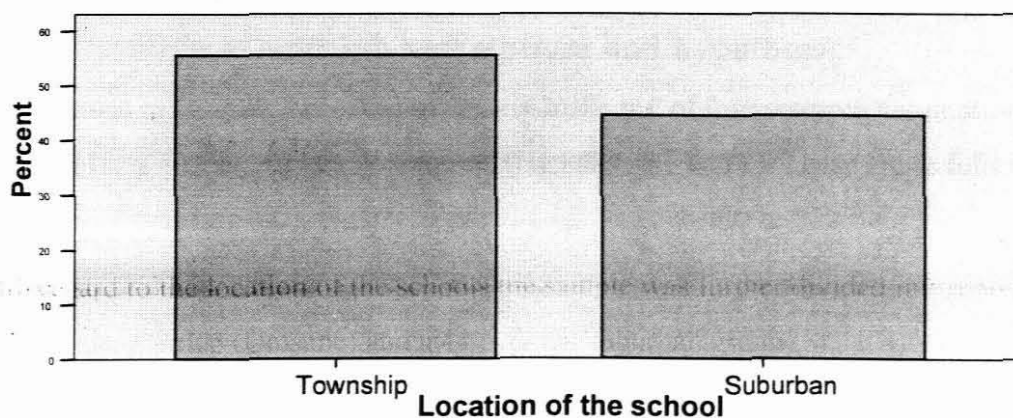
The sample had 1 Principal (1, 9 per cent), 2 Deputy Principals (3, 7 per cent), 8 Heads of Department (14, 8 per cent) and 43 educators on post level one (79, 6 per cent).

FIG 4.3: Distribution of sample according to rank of educators

The principal of Umsebe Primary School did not participate in the study, the reason as to why he abstained is not clear. The teaching experience of the educators ranged from 2 years to 28 years. None of the educators had any formal training in special needs education or inclusive education, except for the two week training they were subjected to before the commencement of the SCOPE project.

4.3 Reiteration of research assumptions and hypotheses

As indicated in Chapter 1 the researcher will make use of four research assumptions (Assumptions 1 to 4) and two hypotheses (Hypothesis 1 and 2). These are as follow:

- Assumption 1:

The training provided to educators, as part of the SCOPE project, was effective for the successful implementation of inclusive education in these pilot schools.

- 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 the study believe that the skills they acquired were effective for the successful implementation of inclusive education in the pilot schools.

- Assumptions 4

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

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

• Assumptions 4
The educators believe in general that the training, support and skills they received were effective

- Hypothesis 1

The educators' characteristics i.e. gender, location and rank will not influence their responses differently;

- Hypothesis 2

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

4.4 Data analysis

An analysis of the four dependent variables, namely training, support, skills and general revealed the following information. The researcher's choice of descriptive statistics was also explained in chapter 3, because the main aim of the research was to determine the opinions of educators who participated in the SCOPE project, in terms of the mentioned dependent variables.

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 result was a finding that 63 per cent of the educators were of the opinion that the training they received in preparation for the SCOPE project was effective to highly effective. The different scale scores of the five items of the training scale were combined to result in a composite table of scores – Table 4.1 shows the composite frequencies of the educators on the training dependent variable.

Table 4.1: Educators' beliefs of effectiveness of training received

Type of training	not and hardly effective	somewhat effective	effective and highly effective	Total
Quality	0	14	40	54
Quantity	1	21	32	54
Relevance	2	14	38	54
Contribution	3	23	28	54
Sufficiency of period	4	18	32	54
Total	10	90	170	270
%	3.70	33.33	62.96	

Not and hardly effective	3.7
Somewhat effective	33.3
Effective and highly effective	62.9

Fig. 4.4 shows these results in a graphical form and it summarizes the opinions of educators on the dependent variable of training. This clearly illustrates overwhelming support for the first hypothesis, namely that "educators are of the opinion that the training they received in preparation for the SCOPE project was effective.

Interpretation: There is overwhelming support in favour of this assumption

Fig. 4.4: Graphic display of educators' beliefs of effectiveness of training
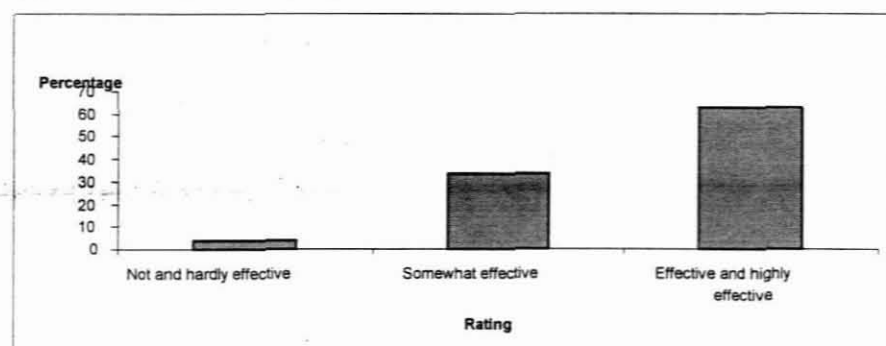
4.4.2 Assumption Two

- **Support-** In order to examine the responses of educators on this variable a series of frequencies were tallied (Buell, Hallam, Gamel –McCormick & Scheer, 1999). These frequencies were then converted to a composite score for all four items of the support scale. The result was a finding that 60 per cent of the educators indicated that the support they received from various levels of the Department of Education during the duration of the SCOPE project was effective. Table 4.2 shows the composite frequencies of the educators on the support dependent variable.

Table 4.2: Educators' beliefs of effectiveness of support

Type of Support	Not and hardly effective	Somewhat effective	Effective and highly effective	total
National Support	7	19	28	54
Prov.Support	7	13	34	54
District Support	5	22	27	54
School Support	1	13	40	54
Total	20	67	129	216
%	9.25	31.01	59.72	100

Not and hardly effective	9.3	
Somewhat effective	31	
Effective and highly effective	59.7	

The researcher also includes Fig. 4.5, which is a graphic display of the opinions of educators on the dependent variable of support. By the same token it can be seen that educators' opinions are overwhelming in favour of hypothesis 2, which shows that educators are strongly of the opinion that the support they received from the Department of Education during the implementation of the SCOPE project was effective.

Interpretation: There is overwhelming support in favour of this assumption

FIG. 4.5: Graphic display of educators' beliefs of effectiveness of support
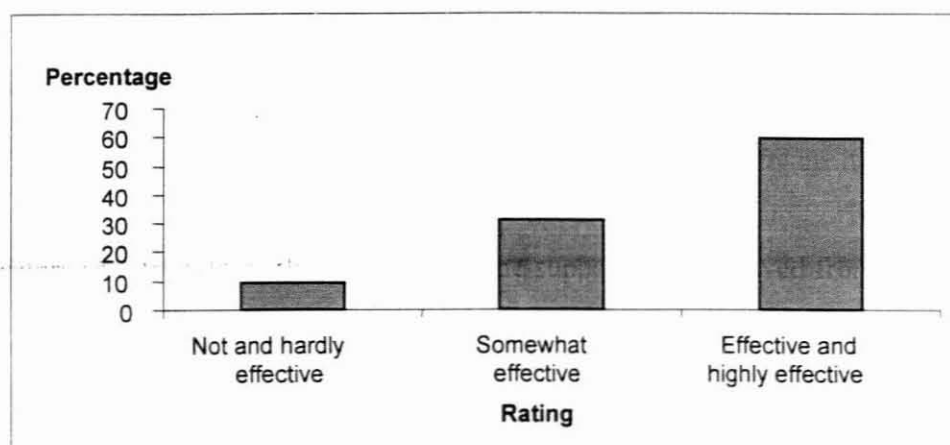
4.4.3 Assumption Three

- **Skills** – In order to examine the responses of educators on this variable a series of frequencies were tallied (Buell, Hallam, Gamel –McCormick & Scheer, 1999). These frequencies were then converted to a composite score for all five items of the skill scale. The result was a finding that 55 per cent of educators reported that the skills they acquired in preparation for the SCOPE project was effective to highly effective. Table 4.3 shows the results of these composite frequencies, in terms of the opinion of educators on the skills dependent variable.

Interpretation: There is overwhelming support in favour of this assumption

Table 4.3: Educators' beliefs of effectiveness of skills acquired

Types of Skills	Not and hardly effective	Somewhat effective	Effective and highly effective	total
Adequacy	5	21	28	54
Quality	1	21	32	54
Relevance	1	20	33	54
Contribution	2	26	26	54
Sufficiency of time	4	20	30	54
Total	13	108	149	270
Percentage	4.81	40	55.18	100

Not and hardly effective	4.9
Somewhat effective	40
Effective and highly effective	55.1

The researcher also saw it fit to provide a graphic display (Fig. 4.6) of the aforementioned results, thereby ensuring a clearer picture of the strong support of educators in favour of hypothesis three, namely that the skills they acquired in preparation for the SCOPE project were effective:

FIG. 4.6: Graphic display of educators' belief s of skills acquired
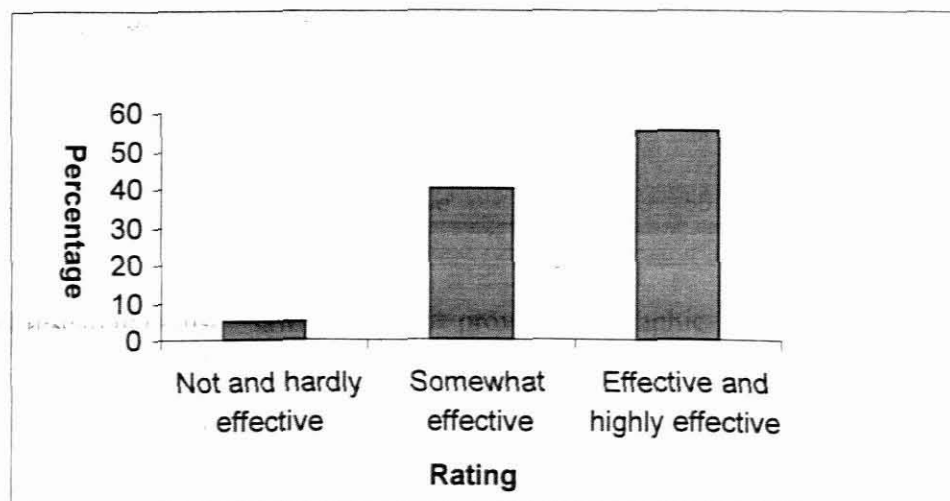
4.4.4 Summary Table

Table 4.4: Respondents' opinions regarding effectiveness of training, support and skills received

Variable	Effective	Not effective
Training	63%	47%
Support	60%	40%
Skills	55%	45%

4.4.5 Assumption Four

• **General** – 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 items of the general scale. The result was a finding that 60 per cent of educators were of the opinion that the training, support and skills were in general ranging from effective to highly effective. Table 4.4 provides a summary of the composite frequencies, indicating the strong support in this regard:

Interpretation: There is overwhelming support in favour of this assumption

Table 4.5: Educators' beliefs of effectiveness on a general level

General Rating	Not and hardly effective	Somewhat effective	Effective and highly effective	Total
Training	3	16	35	54
Support	3	23	28	54
Skills	3	17	34	54
Total	9	56	97	162
Percentage	5.55	34.56	59.87	100

Not and hardly effective	5.6
Somewhat effective	34.5
Effective and highly effective	59.9

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 (Hypothesis 1)

The researcher conducted a Students' t-test in order to determine whether there was a significant difference in the means of the two samples in respect of gender and location and thereby also to establish whether they belonged to the same population. In situations where "the population standard deviation, σ, is not known, the only estimate will be that based upon the sample and such a case we use the t-test instead of the z-tests " (Black, 1999: 362). The same author further states that one of the most basic situations in research is the one where "we want to compare two groups for some trait to see if they are sufficiently dissimilar in order to say that they do not belong to the same population" (Black, 1999: 402). In the case of the current study those two groups are gender and the location of the respondents, respectively.

Tables 4.5 and 4.6 contain the results of the t-test conducted for gender:

Table 4.5: Means and standard deviations for males and females

Scales	Gender	N	Mean	Std. Deviation
Mean score for the training scale	male	9	3.91	.30
	female	45	3.66	.54
Mean score for the support scale	male	9	3.77	.55
	female	-	3.57	.853
Mean score for the skills scale	male		3.44	.42
	female		3.60	.60
Mean score for the general scale	male	9	2.51	.37
	female	45	2.54	.55

Results of t-test performed on the scores of male and female respondents

**Table 4.6: Results of t-test performed on the male and female respondents'
scores obtained on the training, support and skill scales**

		t-test for Equality of Means		
		t	df	Sig. (2-tailed)
Mean score for the training scale	Equal variances assumed	1.31	52	.19
Mean score for the support scale	Equal variances assumed	.67	52	.50
Mean score for the skills scale	Equal variances assumed	-.73	52	.46
Mean score for the general scale	Equal variances assumed	-.15	52	.87

The t-test is used to test whether there is a difference between male and female
participants in their ratings of the dependent variables of training, support, skills and
general.

The null hypothesis states that there are no differences in the mean score in terms of
gender and the alternative hypothesis states that there is a difference in the mean score in
terms of gender.

Interpretation: The *p-values (p>0,193, p>0,505, p> 0,466 and p> 0,879)* show that there
are *no differences* and therefore the null hypothesis is *retained* at the 0.05 level of
significance.

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

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

Tables 4.7 and 4.8 contain the mean scores of the test conducted:

TABLE 4.7: Results of calculations performed in order to determine the means and standard deviations in respect of location of school

	Location of the school	N	Mean	Std. Deviation
Mean score for training scale	Township	30	3.75	.60
	Suburban	24	3.64	.40
Mean score for support scale	Township	30	3.49	.98
	Suburban	24	3.76	.51
Mean score for skills scale	Township	30	3.49	.69
	Suburban	24	3.67	.38
Mean score for general scale	Township	30	2.52	.57
	Suburban	24	2.56	.46

Table 4.8: Results of the t-test performed on the township and suburban respondents' scores obtained on the training, support and skills scales

		t-test for Equality of Means		
		t	df	Sig. (2-tailed)
Mean score for the training scale	Equal variances assumed	.78	52	.43
Mean score for the support scale	Equal variances assumed	-1.21	52	.23
Mean score for the skills scale	Equal variances assumed	-1.15	52	.25
Mean score for the general scale	Equal variances assumed	-.32	52	.74

The null hypothesis states that there are no differences in the mean score in terms of location and the alternative hypothesis states that there is a difference in the mean score in terms of location.

Interpretation: The *p-values (p>0,439, p>0,230, p> 0,255 and p> 0,747)* show that there are *no differences* and therefore the null hypothesis is *retained* at the 0.05 level of significance

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

The researcher decided to conduct a **One -way analysis of variance (ANOVA)** to test for any difference in the opinion of educators on the basis of rank i.e. on whether the educator is a post level 1 educator, a Head of Department (HOD) or a Deputy Principal. The one principal who participated in the study was excluded from the test.

Table 4.9 shows the mean scores of the scales in terms of rank:

Table 4.9 Results of one way ANOVA performed on the different ranks of educators on the training, support and skill scores

	Post level	N	M	SD	P-value	F-value
Training	Educator	43	3.69	0.55	0.99	0.001
	HOD	8	3.70	0.46		
	Dep. Principal	2	3.70	0.14		
Support	Educator	43	3.56	0.86	0.35	1.06
	HOD	8	3.94	0.56		
	Dep. Principal	2	3.12	0.18		
Skills	Educator	43	3.57	0.61	0.72	0.34
	HOD	8	3.68	0.45		
	Dep. Principal	2	3.30	0.42		
General	Educator	43	2.53	0.54	0.97	0.03
	HOD	8	2.58	0.58		
	Dep. Principal	2	2.50	0.24		

The null hypothesis states that there is no difference in the three means scores on the basis of rank i.e. that the means are equal. The alternative hypothesis states that there is a difference in the mean scores i.e. that the means are not equal.

Interpretation: *The p-values show at α = 0,05, that the null hypothesis should be retained, which means that there is no difference in the mean scores of educators based on their rank.* The respective 2-tailed significance values are $p>0.99$, $p>0.35$, $p>0.72$ and $p> 0.97$.

4.5.4 Testing for correlation between years of teaching experience and opinion (Hypothesis 2)

The researcher conducted a *Spearman rho* in order to determine whether there is any correlation between years of teaching experience and the rating that educators gave regarding their opinion of the four dependent variables. The results show that there is in fact a negative correlation between the mean scores of educators on the four dependent variables and years of teaching experience ($r= -0,247$, $r=-0,277$, $r=-0.313$ and $r=-0.327$). This means as years of teaching experience increases, the rating of educators became more negative in terms of all four scales. (See Appendix for complete table)

Interpretation: *The null hypothesis is retained i.e. there is no correlation between years of teaching experience and opinion of educators.*

Table 4.10 Results of the Spearman rank correlation coefficient that was performed in respect for years of teaching experience on training, support and skills

			Years of teaching experience	Mean score for the training scale	Mean score for the support scale	Mean score for the skills scale	Mean score for the general scale
Spearman's rho	Years of teaching experience	Correlation Coefficient	1.00	-.24	-.27 *	-.34 *	-.32 *
		Sig. (2-tailed)		.07	.04	.01	.01
		N	54	54	54	54	54
	Mean score for training scale	Correlation Coefficient	-.24	1.00	.71 **	.59 **	.62 **
		Sig. (2-tailed)	.07	.	.00	.00	.00
		N	54	54	54	54	54
	Mean score for support scale	Correlation Coefficient	-.27 *	.71 **	1.00	.82 **	.69 **
		Sig. (2-tailed)	.04	.00		.00	.00
		N	54	54	54	54	54
	Mean score for skills scale	Correlation Coefficient	-.34 *	.59 **	.82 **	1.00	.60 **
		Sig. (2-tailed)	.01	.00	.00		.00
		N	54	54	54	54	54
	Mean score for general scale	Correlation Coefficient	-.32 *	.62 **	.69 **	.60 **	1.00
		Sig. (2-tailed)	.01	.00	.00	.00	
		N	54	54	54	54	54

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

4.6 Summary

In summary the present chapter dealt with the presentation and analysis of the collected data.

The researcher also provided a breakdown of the final sample in terms of gender, location and rank. This was presented in bar graph format to make it more visually attractive to the reader. Additional graphs were provided for certain of the statistical tests of significance that the researcher conducted.

In as far as the testing of the hypotheses was concerned, it was found that all of them were accepted at the 0,05 level of significance.

In addition the researcher conducted a *t-test* to compare the two means with a view to determine whether they belonged to the same sample and a one-way ANOVA was calculated to compare three means. These both supported the null hypotheses which

stated that there is no significant difference between male and female respondents in terms of their responses, as well as no difference in terms of location of school. The ANOVA supported a finding that states there is no difference in terms of rank of educators with regards to their responses.

Finally, the researcher calculated a Spearman rank (rho) correlation coefficient to determine whether there was any association between years of teaching experience and the opinion of educators in terms of the four dependent variables. As it turned out a negative relationship was established between years of teaching experience and the opinion of educators on the four dependent variables. This therefore implies that there is no relationship between years of teaching experience and responses of educators, be it negative or positive.

4.7 Conclusion

The researcher would like to conclude this chapter by stating that all the statistical tests that were conducted, as presented in this chapter, brings forward one important finding, which is that all evidence point to the fact that educators who participated in the study are of the opinion that the training, support and skills they received in preparation for the SCOPE project were effective.

Chapter five will deal with the discussion of the findings, conclusions, recommendations and limitations of the study.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The previous chapter dealt with the presentation and discussion of the main findings of the study. The current chapter will draw certain conclusions from those findings, which will include a summary of the salient points. Furthermore the researcher will attempt to link the findings with the literature reviewed in Chapter 2. Lastly, the limitations of the study will be discussed where certain recommendations will be made and areas for further research indicated.

5.2 Discussion of findings as per research aim

The researcher would like to point out that it was necessary to have a combination of research assumptions and hypotheses, due to the fact that whole research project was about gauging the opinions of educators on training, support, skills and on a general level. The final result was a set of meaningful findings for each research aim, as will be outlined below. The researcher has already made a case for this course of action in Chapter 1.

5.2.1 Findings with regard to aim number one

The focus of the study was to consider the opinions of educators on the issue of the two-week training they received in preparation for the implementation of the SCOPE project, in the Mpumalanga Department of Education. The assumption was made that the training educators received prior to the commencement of the SCOPE project were effective. The results were quite surprising, because one would think that educators would view a training programme of such a short time span to be ineffective, given the magnitude of

the project. One should also keep in mind that these were educators who only worked in mainstream school settings for the duration of their professional careers.

The fact that the majority of educators were of the opinion that the training they received was effective differed in a major way from the findings of other similar studies on inclusive education. The literature that was reviewed in Chapter 2 revealed those educators, both abroad and local, viewed training as one of the major concerns that needs to be addressed, before inclusive education can be successfully implemented. (Creese et.al, 1997; Ainscow, 2000; Prinsloo, 2001; Engelbrecht et.al, 2003). In certain instances it is argued that inclusive education shows a *"vacuum"* in the training of mainstream educators (Hall & Engelbrecht, 1999). What these studies actually neglected to indicate was: "What should be the duration of such training programmes?" Naicker in Engelbrecht, et.al, 1999, suggests that, as part of a strategic implementation plan, all educators should be retrained over a ten year period – needless to say that the challenge in this regard will obviously be how this will work in practice. These, as well as providing details about the content of such training programmes, remain grey areas that need further research.

Minimal effort was made by a few researchers like Weeks, Bouwer and Sethosa in Prinsloo (2001) and Smith (2000) to try and fill this gap, but this is clearly not sufficient. The researcher actually discovered through this research that the strategies on how to train and support educators, as suggested by Weeks, Bouwer and Sethosa respectively, were not even considered when the educators were trained for and supported in the SCOPE project. The only module that was included was one on Outcomes Based Education (OBE) and Curriculum 2005, as suggested by Sethosa in Prinsloo (2001)

In fact, a study by Forlin (1995) found that "regular educators believed the stress associated with inclusion to be more severe" for them, than did special needs educators working in education support centres. The same study revealed that only 6% and 1% of "regular" educators considered the full time placement of a child with a severe physical disability and intellectual disability to be acceptable or viable, respectively (Forlin, 1995:

182). Therefore the fact that the participants of the present study are more favourable in terms of their opinions regarding the effectiveness of their inclusive training programmes is quite revealing in itself.

The researcher has no clear explanation for this, but one such explanation can be that these educators genuinely feel that learners experiencing barriers to learning should be given a chance in mainstream education, hence their more positive attitude. They may also be more optimistic, because they support inclusion from a strong human rights or social justice perspective (Forlin, 1995).

The training that was provided to educators who participated in the SCOPE project was regarded as effective and equipped these educators fairly well enough in preparation for the implementation of such project. The researcher is of the view that both the pre-service level and an inservice level of training deserve equal attention and emphasis.

5.2.2   Findings with regard to aim number two

By the same token, the objective with this research aim was to ascertain, through gauging the opinions of educators, whether the participants in the SCOPE project regarded the support they received as effective or not. The research assumption was made that educators would regard the support as having been effective.

The research findings on this part of the study were equally surprising, in that sixty percent of the participants indicated that the support they received from the various levels of the Mpumalanga Department of Education was effective to highly effective, which obviously provided overwhelming support for the research assumption.

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

The researcher, in the present study, is not convinced that all these elements were part of the SCOPE project. In practice the two pilot schools were given routine monitoring visits maybe once or twice per month, as a means of support, the success of which remains questionable. The fact the educators in the two pilot schools didn't share resources as envisaged by Engelbrecht, et al., 1999, seemed not to have had any impact on the opinions of the participants.

Another aspect that was missing in the project is the presence of Learning Support Assistants (LSA's), as suggested by Rose (2000). There was definitely no intersectoral collaboration between different government departments, e.g. Health, Social services etc., let alone sharing of resources (human or physical), between the schools who were part of the SCOPE project. The findings show however that educators didn't regard the absence of the LSA's in their classrooms as a drawback. The findings further reveal that the participants felt all but "unprepared, unsupported and unable" to handle the challenges of the SCOPE project, an aspect that was clearly a concern in the study conducted by Rose, 2000.

In the final analysis it can be stated that the support that educators, who participated in the SCOPE project, received, was regarded as effective, from national level down to school level.

5.2.3 Findings with regard to aim number three
The research assumption here was that the educators would regard the skills they acquired in preparation for the SCOPE as effective.

The findings for this part of the research were also consistent with that on training and support. By the same token more than half of educators was of the opinion that the skills they received in preparation for the SCOPE project were effective to highly effective, which once again was highly supportive of research assumption 3.

The educators in this study were exposed to two weeks of practical training, one week for Braille and another week for sign language. This is suppose to be in line with the technical skills as suggested by Swart and Pettipher (2005), in order to work with the

diverse needs of learners. The literature review in Chapter 2 further suggested skills of an "instructional" nature (Smith, et al., 2004) and in addition also inter-personal relationship skills (Hay, 2003). It appears as if this need was addressed through the acquisition of skills in Outcomes Based Education (OBE) and training in remedial education. The researcher can also state that these educators were also trained in the development of "personal skills" to deal with diverse group of learners in their class, as suggested by Lazarus, Daniels and Engelbrecht in Engelbrecht et.al. , (1999) in Chapter 2. The question here remains: "Was this enough?"

The literature further revealed that training educators to implement the model developed by Weeks in Prinsloo (2001), would result in "building the **skills,** knowledge and self-confidence" of such educators. The participants in the present study were definitely not trained in the manner suggested, which seems to suggest that they were left with a major gap in terms of the skills they acquired, but the researcher wish to refrain from making subjective comments regarding the findings in this regard.

It has been argued previously that specific skills should be covered in pre-service courses at higher education institutions, let alone the diversity of skills educators that need to be taught during inservice training. The conclusion therefore is that educators who participated in the SCOPE project regarded the skills they acquired as effective.

5.2.4   Findings with regard to aim number four

The research assumption was made that the educators would be of the general opinion that the training and support they received with the skills they acquired were effective.

The research findings produced overwhelming support in favour of this research aim, in that sixty percent of educators indicated that they regarded the training, support and skills as having been effective for the implementation of the SCOPE project. This result is consistent with the results of the first three research aims and it really doesn't come as a surprise to the researcher.

5.2.5 Findings with regard to aim number five

The research evidence suggested that there was no significant difference in the opinion of educators on the basis of gender, location of school and rank of educators. The hypothesis was retained. This is in line with previous studies on inclusive education, which found no significant difference in the responses of participants with regards to gender, location and rank of educators (Forlin, 1995; Rose, 2000)

5.2.6 Findings with regard to aim number six

The research evidence suggested that there was no correlation between years of teaching experience and the opinion of educators. Once gain this hypothesis was also retained. This finding therefore suggests that no matter what the level of experience of educators, in terms of years, there will be no correlation between their opinion and the number of years. This is similar than the finding of a study by Forlin, 1995, which found no correlation between years of teaching experience and ratings of participants on a Likert-type scale.

5.3 Limitations of the study

5.3.1 Sample

The first weakness is the fact that the sample was a small, non-probability, purposive sample. This makes the generalisability of the findings to the rest of the educator population virtually impossible. Only two of the three pilot schools were included in the study, although the balance between urban and township school was more or less even. The third school was in any event also a township school, which would have tipped the scale more in favour of the latter, were this school also to be included. The sample was also restricted to only one region of the Mpumalanga Department of Education, although the province is divided into 3 regions.

5.3.2 Questionnaire construction

The questionnaire did not include items to measure educators' ratings of the support they received from parents. This was a very important issue highlighted in certain previous studies (Mastropieri & Scruggs, 2004), that could also lead to sustainability and success of inclusive education. The length of the questionnaire may also be viewed as a weakness; although all items had good internal consistency in as far as reliability was concerned.

5.3.3 Data Collection

Data were only collected by employing one specific method, namely through the administration of a questionnaire. This may have been a restriction, in terms of the rich data that may have been yielded should another method, like interviewing have been included. Another method that could have employed by the researcher was to do direct observation of participants in the inclusive classroom, but due to time constraints this was not possible. The generation of qualitative data may have been an added bonus and possibly provided for a richer description of the research aims.

5.4 Recommendations

5.4.1 Training

The researcher would like to recommend that closer collaboration between the National Department of Education and institutions of higher education take place on a **pre-service level,** regarding the courses the latter offer and needs of the schools. The balance between supply and demand is crucial in the wake of the implementation and national rollout of inclusive education in South African schools. The South African government also needs to pump more money into aggressive recruitment drives in order to get more students to study to become educators. In addition more bursaries should be offered, for education study fields across the board and not only for maths and science.

On an **in-service level,** the researcher is of the view point that a 2 week training programme here and another 3 weeks there is not going to result in major paradigm

shifts, that is so desperately needed for full inclusion to be successful in this country. It is believed that the only time we will see significant mindset change on the part of educators will be when educators are actually taken out of the school setting and put on 3 month training courses at identified higher education institutions.

A system of **continuous professional development (CPD)**, should also be introduced for educators, similar to that which exists for health professionals and managed by professional boards, under the auspices of the Health Profession Council of South Africa. Educators need to keep abreast of the latest developments in the field of inclusive education, otherwise they will become "rusty" and this may also act as a counter to fatigue or burnout.

5.4.2 Support

- Parental involvement

In theory much has been said about the positive role that parents can play in education in general and surely now with the introduction of inclusive education in our schools. The challenge now is to actually put this theory into practice. It is therefore recommended that the National Department of Education takes the responsibility and embarks on a vigorous advocacy campaign amongst parents and sell the philosophy of inclusive education. but actively draw parents into education to play a more meaningful and constructive role. This should include creating opportunities for parents to get involved in instructional programmes at school level and not only for extra-curricular activities like fundraising etc. Parents could even play an active part in the so-called multi-disciplinary teams that form an integral part of the inclusive education system.

- Collaboration between special schools and mainstream schools

By the same token this aspect is still only a concept on paper, which has not been concretised fully. At the time of going to press, the various provincial departments of education were still busy establishing the so-called district based support teams, that is suppose to be comprised of officials form the specialised support services at district level.

as well as therapists from special schools, now known as resource centres. Needless to say that certain provinces were more advanced in the establishment of these teams than others. The researcher would like to recommend that the monitoring teams of the National Department of Education, release quarterly progress reports to the broader public to ensure transparency and to prevent provinces from each doing it's own thing in a "dark " corner. The researcher is of the view that this is something owed to the public.

- Skills

All that the researcher would like to recommend here is that more research be conducted on the specific skills that educators need to possess or acquire, in order to make a success of inclusive education in South African. Training manuals should be developed that outline these skills and the minimum duration of training courses in order to master them.

5.5 Conclusion

The present research study, although limited in scope, brought forward some interesting findings, which may regarded as good food for thought, which, in turn, may be further, unpacked in future studies. Educators, who have access to resources (human and physical) and effective support structures, are bound to make a difference or at least have a positive impact in the lives of learners who experience a diversity of barriers to learning and development. The converse is also true- a lack of these important requirements may lead to a despondent and negative educator corps. These educators have the potential to become more demoralised than what they already are, given the rapid and vast array of changes that happened in the South African education system over the last 10 years. The education authorities in South Africa have their work cut out for them for the next 15 to 20 years, if they want to make a success of inclusive education in this country. This will largely depend on how successful they are in conducting ongoing research in the area of inclusion, as well as consistent evaluation of pilot projects such as the SCOPE project, in order to measure it's effectiveness and/or shortcomings.

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APPENDIX A

MPUMALANGA PROVINCIAL GOVERNMENT

De Jager Street
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S?
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Private Bag X9029
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South Africa

Tel no (017) 819 3300/1

Department of Education
Gert Sibande Region

| Iso leTemfundvo | Umnyango Wemfundo | Department van Onderwys | Umnyango Wezemfundo | Department of Education |

Enquiries:-Dr. LH Mathunyane

MEMO

: Mr. CA Persence
PO Box 222
EVANDER
2280

From : Regional Director:Gert Sibande Region
Dr. LH Mathunyane

Date : January 23, 2004

SUBJECT:REQUEST FOR RESEARCH STUDY IN SCHOOLS OF MPUMALANGA DEPT. OF EDUCATION

Your letter dated 21 November 2003 with regard to the above subject has reference.

Permission is hereby granted that you conduct a research towards your Master's degree.

You are kindly requested to submit the following information to this office before you commence with your research.

- Motivation from your promotor

- A declaration that you will not force any person to participate in your research and that this will take place outside office hours/school contact (tuition) time.

The Department of Education wishes you good luck in your research project.

REGIONAL DIRECTOR
DR. LH MATHUNYANE
-pn.dr.lhmathuny23.01.2004

$\underline{28}/\underline{c_1}/\underline{c_4}$
DATE

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APPENDIX B   QUESTIONNAIRE
SECTION A

BACKGROUND INFORMATION

1 Your gender:

MALE	
FEMALE	

2 Years teaching experience:
(Mark with an X)

0-5	6 to 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 school	

5 Indicate the duration of formal
Inclusive Education *training*
received in preparation for the
SCOPE project.
Please tick one option)

1 week	
2 weeks	
3 weeks	
4 weeks	
More than 4 w Specify:	

A week is from Monday - Thursday/Friday
i.e 4 or 5 days

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 in preparation for the SCOPE project					
2 The quantity of work covered during this training					
3 The relevance of the subject matter covered					
4 What was the contribution of the training in terms of your level of preparedness to implement the SCOPE project?					
5 The sufficiency of the training period					
6 The level of support from the National Department of Education					
7 The support from the provincial department of education					
8 The support from the district(regional) level					
9 The support from the school based support team					
10 The adequacy of the skills you acquired in comparisons to those colleagues who did not get training					

11 The quality of the skills imparted to you in preparation for the SCOPE project.					
12 The relevance of the skills you acquired with reference to the SCOPE project.					
13 The contribution of the skills you acquired towards your preparedness to implement the SCOPE project.					
14 The suffiency of the time period during which these skills were imparted.					
15 Your general opinion of the training provided					
16 Your general opinion of the support received					
17 Your general opinion of the skills you acquired towards your preparedness to implement the SCOPE project.					