PRINCIPALS' KNOWLEDGE AND ATTITUDES REGARDING INCLUSIVE EDUCATION: IMPLICATIONS FOR CURRICULUM AND ASSESSMENT

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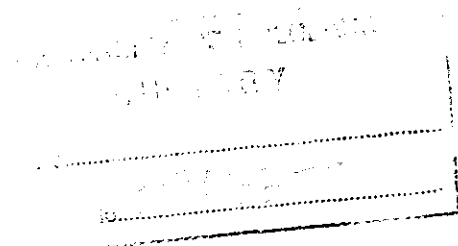
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DECLARATION

I, hereby declare that **"Principals' knowledge and attitudes regarding inclusive education: Implications for curriculum and assessment"** is my own work both in conception and execution and that all the sources I have used or quoted have been indicated and acknowledged by means of complete references.

Signed by _Gerald Simangaliso Mthethwa_ on the _25ᵀᴴ_ day of _January_ 2008.

ABSTRACT

The present study examiners principals' knowledge about and attitudes towards inclusive education. The first aim of the study was to ascertain the extent to which principals know about inclusive education and a child with special educational needs. The second aim was to determine whether principals' biographical factors (gender, teaching experience and phase of the school) have any influence on their knowledge about inclusive education and a child with a special educational needs. The third aim was to ascertain the nature of principals' attitudes towards inclusive education. The fourth aim was to determine whether principals' biographical factors (gender, teaching experience and phase of the school) have any influence on their attitudes towards inclusive education. The last aim was to determine whether there is any relationship between principals' knowledge and attitudes regarding inclusive education. To this end, a questionnaire was administered to a randomly selected sample of two hundred and twelve principals.

The findings reveal that principals differ in the extent to which they know about inclusive education and a child with special educational needs. A high percentage (65.1%) of principals report a high level of knowledge about inclusive education and a child with special educational needs. The findings also show that teaching experience has an influence of principals' knowledge about inclusive education and a child with special educational needs. The findings also indicate that a high percentage (60.8%) of principals hold a positive attitude towards inclusive education. The findings further reveal that gender, teaching experience and phase of the school have

no influence on principals' attitudes towards inclusive education. The last findings show that there is a positive relationship between principals' knowledge about an attitudes towards inclusive education.

On the basis of the findings of this study, recommendations to the Department of Education as well as for directing future research were made.

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DEDICATION

This work is dedicated to my wife, Doris Bonisiwe Mthethwa, who supported me throughout my studies. Her sacrifices and motivation contributed a lot to my education. May the God Almighty be with her for the contribution she made to my success.

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CHAPTER ONE

ORIENTATION

1.1   MOTIVATION FOR THE STUDY

Researchers and practitioners have long studied the role of the school
principals in creating and maintaining effective educational
environments. Research on effective schools has shown that strong
principal leadership influences student achievement (Edmonds, 1982;
Levine & Lezotte, 1990; Pettipher, 2000). While the principal plays an
important role in effective schools, this role must be understood within
the context of the school and should be viewed as a complete interaction
between environmental, personal and school relationship that influence
outcomes (Hallinger & Heck, 1996). Today, as schools experience great
change, knowledge and attitudes of principals regarding educational
changes must continue to be examined and described.

One of the most significant changes occurring in educational practice
worldwide is in the area of special education services. Prior to 1975,
nearly one million children with disabilities were not receiving any
education at all (Langone, 1998 : 1). The passing of laws in countries like
the United States of America (USA) has changed the situation. The
passing of the Educational for all Handicapped Act (EHA) in 1975 for
example, changed this fact. The EHA guaranteed all American students
with disabilities a free appropriate education that is individualised and
provided in the least restrictive environment. This phase "Least
restrictive environment"(LRE) has caused much debate since it has no

unitary definition. Rather the least restrictive environment can only be defined when examining a single child. Increasingly, however, the least restrictive environment is being identified as a regular education school building. Today, nearly 75% of all children in special education receive portions of their education either within a regular classroom or school building (Langone, 1998 : 1).

As the complexion of special education changes, the responsibility for providing free appropriate public education in the least restrictive environment to students with disabilities and burden of managing special education policies and practices is being shifted to the development of principal (Patterson, Marshall & Bowling, 2000 : 10). Principals are required to provide support and supervision to special education, teachers and programmes within their school building (Pelco, Mclaughlin, Korinek & Boerio, 1997 : 21). On a daily basis, principals make decisions related to special education and provide leadership in special education service delivery in school across the nation. Hill (1993) found in his study that principals reported 12% of their day being spent on special education issues.

These changes in special education come in part due to educational law, for with each subsequent re-authorisation of the EHA and most recently with the passing of the Individuals with Disabilities Act (IDEA) of 1997, American schools are asked to "include" all students prior to placing them in more restrictive environments. In addition to special education law, overall educational policy has impacted on the provision of special education. "The Regular Education Initiative (REI) of 1985 and the

implementation of America 2000 of 1991, gave public schools the chance to educate everyone among us" (Wiggle & Wilcox, 1999). The movement to include students with disabilities in general education classrooms and schools has gained support from educators, researchers, and parents (Gartner & Lipsky, 1987 : 368. Stainback & Stainback, 1996; Lipsky & Gartner, 1996; Ainscow, 1999 : 293).

This concept of including children with disabilities in regular education environments has been identified using many labels – mainstreaming, integration, and most currently, inclusion. Inclusion seeks to educate children with disabilities in regular education classrooms rather than in segregated settings (Mayrowetz & Weinstein, 1999 : 425). While there has been much debate about the effectiveness of inclusion that does not change the fact that "...the number of districts that reportedly practice inclusive education programmes are increasing at a dramatic rate" (Fuchs & Fuchs, 1993 : 194). Although the number of children with disabilities educated in general education classrooms or schools has increased dramatically, understanding how inclusion works and what inclusive practices mean for principals and schools are limited.

In South Africa, the 1996 Constitution with its Bill of Rights, together with new education legislation and policy such as White Paper 6 on Special Needs Education have made it possible to place learners with disabilities or special educational needs in mainstream education. The policy is clear that no learners should be denied access to an ordinary classroom on the grounds of any disability. The learner with special educational need is no longer expected to adapt to the education system

but the system has to accommodate his/her needs (Department of Education, 2001).

The movement towards inclusive education has various potential advantages – not only for the child with special educational needs, but also for the child without any disability (Graves & Tracy, 1998 : 220). In the case of the child without a disability, this can lead to positive changes in attitude towards disability. In addition, growing opportunities for social contact with fellow learners who are not disabled can create tolerance towards diversity and facilitate friendships (Roeyers, 1996 in Byrnes & Sigafoos, 2001 : 409). Given the fact that highest academic demands are made on individuals, this can result in the disabled child achieving better academic results (Caissie & Wilson, 1995 in Byrnes & Sigafoos, 2001 : 409). Finally, the contact with non-disabled learners can offer the learner with specific educational needs the opportunity to develop skills for optimal functioning in the community (Gearhart & Weishahn, 1984 in Byrnes & Sigafoos, 2001 : 409).

The principal's role in inclusive education is paramount and has been cited as the single most individual in creating school culture and climate (Sergiovanni & Starratt, 1988). The role of the principal is to build a shared vision within an inclusive school and this is one of the key factors in successfully implementing inclusive education (Lispky & Gartner, 1996; Ainscow & Hopskins, 1992 : 81; Ingram, 1997 : 1; Thomas, Walker & Webb, 1998 : 16). To lead and manage an inclusive school necessitates the principals' belief that all children can learn resulting in

providing all children equal access to an integrated curriculum and quality education (Pettipher, 2000 : 63).

Research has demonstrated that while the burden of managing special education has shifted to the principal, principals have a limited knowledge of special education regulations (Sirotnik & Kimball, 1994 : 598). These authors found in their study of preparation programmes for general education administration conducted in the USA that special education was not adequately addressed. Only five States within the limited States required any special education instruction for administrator certification (Patterson *et al.*, 2000 : 9).

Few principal certification programmes have adopted anything more than a cursory course in special education. This scarcity of training results in principals lacking the comprehensive knowledge of the characteristics of special learners or knowledge of the complex procedure needed in order to ensure that 'students and parents' rights are met (Goor, Schwenn & Boyer, 1979 : 135). Eighty five percent of all principals' report that formal training in special education is needed to be a successful principal, yet over 40% of practicing principals report no preparation in special education (Asperrdon, 1992 in Wigle & Wilcox, 1992).

Principal's knowledge about inclusive education as well as their attitudes towards it can determine the role they can play in managing it.

1.2 STATEMENT OF THE PROBLEM

A review of the literature reveals that researchers have paid relatively little attention to the Principal's role in inclusive education (Bailey & Du Plessis, 1997 ; Wigle & Wilcox, 1999; Ingram, 1997; Stainback & Stainback, 1996; Falvey, 1995). The main problem to be investigated in this study pertains to the knowledge and attitudes of principals regarding inclusive education in mainstream schools. More specifically, this study intends to find answers to the following questions:

1.2.1 To what extent do principals know about inclusive education and a child with special educational needs?

1.2.2 Do principal's biographical factors (gender, teaching experience and phase of the school) have any influence on their knowledge about inclusive education and a child with special educational needs?

1.2.3 What is the nature of principals' attitudes towards inclusive education?

1.2.4 Do principals' biographical factors (gender, teaching experience and phase of the school) have any influence on their attitudes towards inclusive education?

1.2.5 Is there any relationship between principals' knowledge and attitudes regarding inclusive education?

1.3   AIMS OF THE STUDY

The following specific aims are formulated:

1.3.1 To ascertain the extent to which principals know about inclusive education and a child with special educational needs.

1.3.2 To determine whether principals' biographical factors (gender, teaching experience phase of the school) have any influence on their knowledge about inclusive education and a child with special educational needs.

1.3.3 To ascertain the nature of principals' attitudes towards inclusive education.

1.3.4 To determine whether principals' biographical factors (gender, teaching experience and phase of the school) have any influence on their attitudes towards inclusive.

1.3.5 To determine whether there is any relationship between principals' knowledge and attitudes regarding inclusive education.

1.4   HYPOTHESES

Based on the above aims of the study, the following hypotheses are formulated.

1.4.1 Principals do not differ in the extent to which they know about inclusive education and a child with special educational needs.

1.4.2 Principals' biographical factors (gender, teaching experience, and phase of the school) have no influence on their knowledge about inclusive education and a child with special educational needs .

1.4.3 Principals' attitude towards inclusive education is neither positive nor negative.

1.4.4 Principals' biographical factors (gender, teaching experience and phase of the school) have no influence on their attitudes towards inclusive education.

1.4.5 There is no relationship between principals' knowledge and attitudes regarding inclusive education.

1.5 DEFINITION OF TERMS

1.5.1 Principal

The term principal means, an educator appointed or acting as the head of the school (Republic of South Africa, 1996a : 2).

1.5.2 Attitudes

An attitude refers to the way in which one thinks (cognitive component), feels (affective component) and intends to behave (behavioural component) towards an attitude object (Ngidi, 1995 : 17). The same definition is used in this study to refer to the attitudes of Principals toward inclusive education.

1.5.3   Inclusive education

Inclusive education means to integrate students with special needs into mainstream schools (Chiuho, 2005 : 1). For the purpose of this study, inclusion refers to the process of placing students with disabilities or special needs in classrooms with children who do not have such disabilities or needs. In this study, students with special needs or disabilities, refer to children who might previously have been placed in a special school or unit. It does not refer to students who have learning difficulties which merely require some form of remedial assistance.

1.5.4   Curriculum

There is no generally accepted definition of the term curriculum, it should be explained in the context in which it is being use (Carl, 2002 : 34). The concept curriculum can therefore have a wider as well as a narrow meaning depending on the context in which it is used (Carl, 2002 : 39). In this study, the term curriculum refers to all the learning experiences offered by a school during and after school.

1.5.5   Assessment

The term assessment is used to refer to judgements made about a leaner's performance (Le Grange & Reddy, 1998 : 37).

1.6   PLAN OF THE STUDY

This study is planned as follows:

CHAPTER ONE

This chapter consists of motivation for study, statement of the problem, aims of study, hypotheses, definition of terms and a plan for the organisation of the whole study.

CHAPTER TWO

This chapter entails theoretical background to the study.

CHAPTER THREE

This chapter details research design and methodology of the study. This includes the collection of data, selection of sample, and plan for organizing and analysis of data.

CHAPTER FOUR

Chapter four deals with presentation, analysis and interpretation of data. The formulated hypotheses are tested in this chapter.

CHAPTER FIVE

Chapter five presents summary, conclusions and recommendations of the study.

CHAPTER TWO
AN ANALYSIS OF AND EMPIRICAL STUDIES ON INCLUSIVE EDUCATION

2.1 INTRODUCTION

Traditional education systems worldwide have, for years, provided special education to students with special needs or disabilities (Rynack & Alper, 1996 : xiii). As the educational, social, political, and economic needs of society underwent rapid change, it became increasingly evident that these traditional ideas of schools and classrooms were becoming outdated (Sands, Kozleski & French, 2000 : 4). The effectiveness of traditional education system was questioned and as a result the concept of inclusive school practices was widely discussed as a philosophical basis for the development of one education service delivery system to serve all learners (Pottas, 2005 : 19).

The aim of this chapter is to: provide an overview of world initiatives for the development of inclusive education, discuss the influence of these policies on inclusive education policies in South Africa and review empirical studies on inclusive education.

2.2   WORLD INITIATIVES FOR INCLUSIVE EDUCATION

The principle of inclusion naturally developed out of the normalisation, mainstreaming and integration movements of the 1960s, 1970s and 1980s (Pettipher, 2000 : 2). Normalisation means that all citizens, including those with disabilities, should have equal access to the ways of life and everyday activities of society (Smith, 1998 : 20; Greer & Greer, 1995 : 340; Bailey & Du Plessis, 1997 : 428). The essential principle of normalisation is the valuing of people in society. Both *mainstreaming and integration were attempts to apply this principle in education* (Pettipher, 2000 : 2).

In the 1970s changes in liberal, critical and progressive democratic thoughts had a direct influence on the education system as the traditional practice of segregating learners with special needs in separate schools was challenged (Engelbrecht & Snyman, 1999 : 7). Education for individuals' with disabilities has received worldwide attention and commitment, both as a result of United Nations (UN) activities and through global statements and initiatives endeavouring to bring about 'Education for All' (Smith-Davis, 2002), In the *Declaration of the Rights of Disabled Persons,* UN member countries confirmed their support for human rights, education, integration, full employment, and conditions of economic and social progress for persons with disabilities (Pottas, 2005 : 21).

In the 1980s and 1990s different initiatives have been published to promote the rights of the disabled such as the following:

- The world programme of action concerning disabled persons (1982)
- The world declaration on education for all (1990).
- Standard rules on the equalisation of opportunities for person with disabilities (1993) (Smith-Davis, 2002 : 77 in Pottas, 2005 : 21).

In June 1994, an international conference, with representatives of 92 governments and 25 international organisations met in Salamanca, Spain, with the purpose of developing an international policy document on special needs education, and setting up a framework for action in this regard (UNESCO, 1994 : iii; Bothma, Gravett & Swart, 2000 : 200; Pottas, 2005 : 21). The Salamanca statement reaffirmed the international trend towards inclusive education, when it proclaimed that "...regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all; moreover, they provide an effective education to the majority of learners and improve the efficiency and ultimately the cost effectiveness of the entire education system..." (UNESCO, 1994 : ix; Bothma *et al.*, 2000 : 200; Pottas, 2005 : 21).

In April 2000 the *Dakar Framework for Action: Education for All* was adopted at the World Education Forum in Dakar, with the aim of achieving worldwide education for all by 2015 (Smith-Davis, 2002 : 77). Aspects that were emphasised were early childhood education, literacy, gender equity and education for all–including the disadvantaged and those with special learning needs (Pottas, 2005 : 22).

2.3 INCLUSIVE EDUCATION AS A SOUTH AFRICAN POLICY

The changes in world initiatives regarding inclusive education have influenced the move towards inclusive education in South Africa (Naicker, 1999 : 12). The first important shift towards inclusive education occurred when the move from the medical model, utilised in the field of special education, changed to an ecological and systems theory (Hay, 2003 : 135). The medical model utilises the patient-diagnosis-treatment sequence, emphasising pathology, using as its point of departure the philosophy that the child and his/her impairment is the problem (Hall, 1997 : 74) and cause for educational failure (Avramidis, Bayliss & Burdern, 2000b : 277). The solution was to adapt the child and his/her circumstances to the requirements of the world as it is (Hall, 1997 : 74 in Pottas, 2005 : 22).

The changed viewpoint no longer places the focus on the individual who needs to fit in, but on the potential and responsibility of the circumstances in which the individual is placed (Swart, Engelbrecht, Eloff & Pettipher, 2002 : 176). The environment (system) must change

to accommodate every individual, irrespective of any disability. This approach is best described by the concept "inclusion", which is more commonly applied in education systems (Pottas, 20005 : 23).

Although varieties of inclusive practices are beginning to emerge, each offering different solutions, some critical aspects fundamental to this concept are commonly agreed on, such as the principles of social justice, equitable education systems and the responsiveness of schools towards diversity (Swart *et al.,* 2002 : 176). The implementation of this can and should first of all be evaluated against the framework of relevant education policies (Pottas, 20005 : 23).

Since 1994, when democratic government came into power in South Africa, the country has been in the process of social, political, economic and educational transformation aimed at developing a more inclusive society (Hay, Smit & Paulsen, 2001 : 213). The Constitution of The Republic of South Africa Act 108 of 1996 includes a Bill of Rights which *entrenches the right of all learners, regardless of race, gender, sex, colour, sexual orientation, disability, religion, conscience, belief, culture or language, to basic education and to equal access to educational institution* (Republic of South Africa, 1996a). The 1996 Constitution together with new education legislation and policy, for example, The White Paper on Education and Training No. 1 of 1995 and the South African Schools Act No. 84 of 1996 recognises diversity of equal education for all learners within a single system of education. These policies and laws provide framework for and are the first steps towards inclusive education in South Africa (Donald, Lazarus &

Lolwana, 1997 : 29, Lazarus, Daniels & Englebrecht, 1999 : 46; Pettipher, 2000 : 3).

The South African Schools Act of 1996 categorically states that "a public school must admit learners and serve their educational requirements without unfairly discriminating in any way (Republic of South Africa, 1996b : 6). This implies that no learner may be turned away from any public school if it is possible to accommodate him/her. This also means that schools may legally be obliged to provide appropriate educational support services and make adjustments to accommodate learners with special educational needs should they want to attend a regular public school (Bothma *et al.,* 2000 : 200). The South African Schools Act of 1996 and White Paper on a Integrated National Disability Strategy of 1996 stress the principle of education as a basis human right, which implies that all learners have the right to equal access to the widest possible educational opportunities (Muthukrishna, 2000 : 1).

The policy of inclusive education in South Africa is however not static. The South African Ministry of Education released Education White Paper 6: Special Needs Education – building an inclusive education and training system in July 2001. This policy was initiated in 1996 when the Ministry of Education appointed the National Commission on Special Needs in Education and Training (NCSNET) and the National Committee for Education Support Services (NCESS) to undertake a needs analysis and make recommendations on all aspects of special needs and support services in education and training in South Africa

(Department of Education, 1997). The Final Report of this investigation was released on 28 November 1997 (Muthukrishna & Schoeman, 2000 : 230).

A very important aspect that NCSNET/NCESS dealt with was the terminology regarding 'special education needs' and 'education support'. They found the use of the words 'special education needs' problematical. The report argues that historically in South Africa, the notion of "special educational needs" has been used to categorise all learners who for various reasons did not fit into the mainstream system and to identify deficits within these learners, with little attempt to explore the causes of learning breakdown that may be embedded in the system (Muthukrishna, 2000 : 3). Their 'needs' highlight their personal inadequacies rather than challenge social inadequacies in the system (medical model). According to the Commission it is important to identify the causes for learning breakdown in the system and focus the need for 'education support' on the development of the system rather than merely on the support of individual learners (ecological systemic approach) (Pottas, 2005 : 28; Hegarty, 1994 : 26). The concept of 'barriers to learning' was proposed in order to identify all the aspects that could possibly lead to the inability of the system to accommodate diversity, which could in turn lead to learning breakdown or prevent learners from accessing education provision (Lomofsky & Lazarus, 2001 : 311; Pottas, 2005 : 28). It was stipulated that the barriers could be located within the learner, within the centre of learning or school, within the education system or/and within the broader social, economic and political contexts (Muthukrishan & Schoeman, 2000 : 324

Pettipher, 2000 : 3). Therefore, the education system must be structured and must function in such a way that it can accommodate and be responsive to the diverse needs of the learner and system needs (Lomofsky & Lazarus, 2001 : 311; Muthukrisna, 2000 : 3; Department of Education, 1999 : 3).

The following most important barriers were identified by the NCSNET and NCESS:

- Socio-economic barriers
- Attitudes
- An inflexible curriculum
- Language and communication
- Inaccessible and unsafe physical environments
- Inappropriate and inadequate provision of support services
- Lack of parental recognition and involvement
- Lack of human resources development
- Lack of enabling and protective legislation
- Disability (Department of Education, 1997: 11–19; Muthukrishna, 2000 : 3; Pettipher, 2000 : 3; Pottas, 2005 : 28 – 30).

Based on the findings of the NCSNET and NCESS, specific strategies were agreed on that could be applied in the restructuring of the system (Department of Education, 1997 : 54–67); Lomofsky & Lazarus,

2001: 312-313; Muthukrishna & Schoeman, 2000 : 327 – 331; Pottas, 2005 : 30 – 32). These strategies are discussed below:

- *Transforming the system:* The whole education system must change if it is to respond effectively to the needs of all learners. All aspects of the education system must move away from an isolated focus on changing the person' to a systems-change approach.

- *Developing an integrated system of education:* The separate systems of education ('special' and 'ordinary') would have to be integrated in order to respond to the diverse needs of the learner population. This integrated system will be expected to offer a range of options for learners, giving learners the possibility of moving from one learning context to another, providing opportunities for the inclusion of the learner in all aspects of life.

- *Infusing support services:* Instead of supporting individual learners, the support system must support educators and the system should be responsive to diversity.

- *A holistic approach to institutional development:* All aspects of learning should be developed in order to facilitate a positive culture of teaching, learning and services. This would include aspects such as strategic planning an evaluation, organisational leadership and management, structures and procedures, staff development and other mechanisms.

- *Development of a flexible curriculum:* A flexible curriculum must be provided, capable of responding to the differences among learners and ensuring that all learners can participate effectively in the learning process. These recommendations include critical aspects regarding the content of learning, teaching approaches, learning materials and assessment.

- *Promoting the rights and responsibilities of parents:* As parents play a critical role in the education of their children, it is important that partnerships are developed between parents and the educators. Parents must not only be empowered to participate but must become actively involved in the planning, development, implementation and monitoring of education and support.

- *Development of a community-based support system:* Structured community participation is essential to develop and support education provision, since the existing support services are functioning as highly specialised, high-cost modules available to only a small minority of learners. Existing support systems in the country and communities must be utilised in order to reach a larger number of learners and to support the learning process more widely.

- *Development programmes for educators and other human resources:* Educators and support providers must be equipped with the necessary skill and knowledge to promote appropriate attitudes so that they can respond to the needs of all learners. This

should include effective development programmes that focus on orientation and pre-and in-service professional development, within a team approach.

- *A preventative and developmental approach to support:* The aim should be to develop the centres of learning is such a way as to prevent social and learning problems. This approach should include reducing environmental risks, promoting resilience among learners and communities, and developing a supportive and safe environment for learners (Pottas, 2005 : 30-32).

The findings and recommendations of the NCSNET/NCESSS led to the publication of the Education White Paper 6: Special Needs Education – building an inclusive education and training system in 2001. The White Paper provides a framework for establishing the inclusive education and training system. It lists key strategies to be adopted in establishing the system in South Africa (Department of Education, 2001 : 5).

The White Paper 6 (Department of Education, 2001) refers to an Inclusive Education and Training System as a single integrated system of education that accommodates the learning needs of all learners irrespective of gender, class, age, race, cultural diversity, and ability/disability. It is based on the principle that all learners can learn and all learners need support. The policy advocates that an Inclusive Education and Training System is one that infuses special needs and support services throughout the system. (Department of Education,

2001 : 9). Key strategies to be adopted in establishing inclusive education in South Africa show the fundamental shift in theory and practice from specialised education to inclusive education. This shift is illustrated in figure 2.1.

Specialised education	Inclusive Education
1. Uses category of Disabilities as its organising principle.	1. Uses barriers (Systemic, societal, pedagogic and intrinsic) to learning as its' organising principle.
2. Support programmes and facilities structured along categories of disabilities	2. Provision of support programmes or facilities based on levels of support (viz. high, moderate, low) required.
3. Assessment: reliance in specialist professionals. The focus was on individual's assessment to determine needs.	3. Assessment: Teacher driven and curriculum based. Focus on holistic assessment to determine systemic needs to respond to learner needs. Role of specialist, professionals, consultation, mentoring and programme development.
4. Promoted segregation from the mainstream	4. Promotes inclusion within the mainstream.
5. Development of Separate Specialised Curriculum.	5. One National Curriculum for all learners.
6. Structures: Special classes, disability specific special schools, psychological services.	6. Structures: Ordinary Schools, Full-service Schools, Special/Resource Schools, District Based Support Teams (DBSTs), Instruction Based Support Teams (IBSTs).

Figure 2.1 Fundamental shift in theory and practice from specialised education to inclusive education

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Concerning barriers to learning and development, "Barriers" as used in the White Paper 6 refers to all those intrinsic, societal, and pedagogic factors that impede learning and development. Examples of such factors include:

- *Systemic:* For example, inadequate facilities at schools, overcrowded classrooms, lack of basic and appropriate learning materials, assertive devices, policy and curriculum issues.

- *Societal:* For example, sever poverty, late enrolment at school, communication, violence, issues related to the care and support of those affected and infected with HIV-Aids.

- *Pedagogy:* For example, inappropriate teaching methods, insufficient support to educators, inappropriate assessment procedures.

- *Intrinsic:* For example, barriers that emerge from disabilities that are located in the learner viz. neurological, physical, sensory and cognitive (Department of Education, 2001 : 10).

Inclusion must therefore be viewed as being broader than disability. It refers to four major areas from which barriers emerge. Disability or intrinsic factors is part of only one of four areas. The white paper is based on the principle that learning disability in the main arise largely from the inadequate provision and support within the education system rather than from the learner.

Regarding levels of support required, support must no longer be seen as focusing on 'deficits' that have been 'diagnosed' in individual attention by specialist staff. Support is defined as all the activities and assistance needed that would increase the capacity of the school to respond to diversity. Support focuses on addressing barriers. Inclusion is defined as centrally a curriculum issue since curricula create the most significant barrier to learning and exclusion for many learners. Support must therefore be organised in such a way that the range of barriers that can emerge from the curriculum (e.g. policy, content, language of teaching and learning, management and organisation of classrooms, learning style and pace, time frames for completion of curricula, materials, assessment methods are uncovered and addressed. Support would be mainly curriculum adaptation (Department of Education, 2001 : 11).

The White Paper talks about creating support services along three levels:

- *Low-intensive* support which would be provided at ordinary schools,

- *Moderate* support which would be provided at Full-Services schools, and

- *High-intensive* support, which would be provided at Resources Centres/Special Schools.

To determine the intensity of support required, the needs of the learner, educator, school and system at large need to be considered. Therefore considering more than individual leaner needs arrives at the intensity level.

With regard to inclusion, The White Paper 6 advocates that withdrawal into special settings should be reduced to the minimum. In the light of the above broader definition of support, the local ordinary school should always remain the first option. No learner who could receive the necessary support at the local school should be moved from his/her current setting. There is a move away from developing separate curricula and providing support outside the mainstream classroom (Department of Education, 2001 : 12).

The paper further advocates a single integrated system of education. Support is curriculum based and should be part of the mainstream curricula and environment of the school. Multi-level classroom activities, co-operative learning and curriculum enrichment are emphasised.

The White Paper 6 speaks of three types of schools that would form part of an Inclusive Education and Training System. These include:

• *Ordinary schools:* These refer to public primary and high schools that would provide low levels of support. The nature of support provided at these schools to accommodate diversity would include multi-level classroom instruction, promotion of co-operative

learning, curriculum enrichment, and dealing with learner's behavioural problems.

- *Full-service schools*: Such schools would include ordinary, primary and high schools that will be equipped to provide for the full range of learning needs and to address barriers to learning. Special attention will be paid to developing flexibility in teaching practices and style through training, capacity building and the provision of support to learners and educators in these schools. The support they will receive will include special attention from the District Support teams, as well as physical and material resources. Such schools would therefore provide moderate levels of support.

- *Special schools/Resource centres*: Special schools will be redefined to be Special Schools/Resources Centres. Such sites will no more be identified in terms of categories of disabilities. These highly specialised and highly subsided sites will provide high intensity of support. They will also serve an expanded learner base by providing expertise and support to district terms, neighbourhood ordinary and full service schools (Department of Education, 2001 : 12).

Concerning assessment as a teacher-driven and curriculum based, The White Paper 6 argues that the past assessment practices based on the reliance of specialist professionals promoted exclusionary practices as it often-favoured learners from urban advantaged contexts. It also created an unnatural division between curriculum delivery and

assessment. It had also not been conducive to making scarce specialised services and resources available to all learners in a cost effective way. In White Paper 6 assessment is envisaged to be teacher-driven and curriculum based and moving away as far as possible from the over reliance on professionals. The role of psychologists and therapists working within the system would be revised to be in line with White Paper 6, with the emphasis being on mentoring, consultation, monitoring and programme development.

It is argued that the RNCS provides the framework for decision-making and support. Ordinary educators and everyone who is involved directly with the learner would be part of the assessment process. The assessment tools and procedures used to determine barriers to learning and development must take into account the teaching and learning process and the background of the learner.

2.4   TEACHERS' ATTITUDE TOWARDS INCLUSION

Although the focus of this study is on principals, previous research on teachers' attitudes towards inclusive education may shed more light into this investigation. Research on teachers' attitudes towards inclusive education has been conducted in foreign countries and to a limited extent in South Africa.

2.4.1   Research findings in foreign countries

Research on teachers' attitudes toward inclusion undertaken in several foreign countries have provided a wide range of information in this area. However, the review in this study cannot be complete because studies conducted in different counties may not be easily compared to one another due to variations and differences in their education systems.

In general it seems that a majority of teachers support the idea of inclusion, but foresee problems in its practical implementation. In their meta-analysis of teacher attitudes in the USA, Canada and Australia, which included 28 studies published between 1958 and 1995, Schruggs and Mastorpieri (1996 : 11 in Pottas, 2005 : 62) reported that two-thirds of the teachers (n = 10560) surveyed agreed with the general concept of inclusion. Responses appeared to vary according to whether these practices were applied to their own classes and to different disabling conditions. Only one-third of the teachers believed they had sufficient time, skills training and resources necessary for implementing any policy regarding inclusion.

Teachers with a negative view of the process of inclusion seem to link their attitude to active experiences of inclusion. Vaughn, Elbaum & Schumm (1996, in Avramidis & Norwich, 2002 : 134) determined – through the use of focus groups interviews – that the majority of teachers, who were not actively involved in inclusive practice, had strong negative feelings about inclusion and that "...the decision

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makers were out of touch with classroom realities" (Avramidis, *et al.*, 2006b : 280). Several factors were determined that would affect the success of inclusion, namely class size, inadequate resources, lack of teacher preparation and the extent to which all students would benefit from inclusion (Pottas, 2005 : 62-63).

However, it appears that the implementation of inclusive practice often resulted in positive changes in teacher attitudes. Villa, Thousand, Meyerers & Nevin (1996 : 10 in Pottas, 2005 : 63) indicated in their study that although teachers appeared to be negative in general, the implementation of inclusive practices often resulted in their attitudes turning positive at the end of the implementation cycle, once they have gained the professional expertise needed to implement the inclusive philosophy. These findings were confirmed by a study undertaken by Avramids, Bayliss and Burden (2000a : 207), which indicated that educating learners with special needs in inclusive settings resulted in positive changes in teacher attitudes. Although a high level of experienced teaching in inclusive classrooms is associated with higher rates of concern for included learners with special needs, it does not guarantee positive attitudes as teachers with a great deal of negative inclusive experience may be less likely to be concerned about their included students (Cook, Tankersley, Cook & Landrum, 2000 : 20 in Pottas, 2005 : 63).

General aspects of concern appear to be the rights of not only the learner with specific needs but also the rights of the other learners in the classroom and their own rights as teachers (Forlin, 1998 : 103).

Teachers are concerned about their own expectations regarding their role during inclusive practices, as they need to be accountable and responsible for the learner with specific needs as well as for their regular class learners. Their perceived lack of knowledge and personal efficacy regarding the education of a learner with specific needs appears to be their biggest concern (Forlin, 1998 :103 in Pottas, 2005 : 63).

2.4.2 Research findings in South Africa

A number of studies that have been conducted in South Africa indicate that educators' attitudes towards inclusive education are negative. These include studies by Hoover (1984 : 34); Davies and Green (1998 : 98); Daane, Beirne-Smith and Dianne (2000 : 2); Mushoriwa (2001 : 142); Avramidis *et al.*, (2000a : 192); Sadek and Sadek (2000 : 1); Bothma *et al.*, (2000 : 203); Marshall, Ralph and Palmer (2002 : 209); Mashiya (2003 : 60).

A comprehensive study conducted by Hay, Smith and Paulsen (2001 : 213) revealed that teachers (n = 2 577) in South Africa have a definite lack of knowledge about issues relating to inclusive education. Furthermore, the teachers felt unprepared and unequipped to teach in inclusive classrooms as a result of their lack of training, lack of time, large classes and lack of teacher experience (Pottas, 2005 : 64). Fear of not being able to manage diversity resulted in feelings of hopelessness and in learners being referred for assessments by specialists and placements in special programmes (Swart *et al.*, 2002 :

183 in Pottas, 2005 : 64). Other specific concerns associated with attitudes, included the lack of educational and teacher support, insufficient facilities, infrastructure and assistive devices. Negative attitudes and labelling resulted from misconceptions and assumptions about learners with specific educational needs and the potential effect of inclusion on these learners as a well as on other learners in the classroom (Swart et al., 2002 : 185 in Pottas, 2005 : 64).

A further study identifying the possible stressors for South African teachers in the implementation of an inclusive education revealed the four most stressful areas as administrative issues, the behaviour of the learner, the teacher's perceived self-competence and the parents of the learner with specific educational needs (Engelbrecht, Forlin, Eloff & Swart 2001 : 82 in Pottas, 2005 : 65). Administrative issues that worried the teachers included having to take full responsibility for the learner with specific educational needs as well as for all the other learners in the class. Further administrative issues included adapting the curriculum; adjusting lesson plans and obtaining fund for necessary support. With regard to the learners' behaviour, poor communication skills and short attention span appeared to place stress on teachers. The teachers' perceived lack of competence as a result of reported inadequate pre-service or in-service training to prepare them for inclusive education also caused them to stress. Issues pertaining to the parents of the learners with specific needs included limited contact with parents, and parents' perceived lack of understanding of the learners' capabilities (Engelbrecht et al., 2001 : 82 in Pottas, 2005 : 65).

On closer investigation of these research results, it appears that teachers in South Africa still tend to think in terms of the previous education system when it was accepted that some learners 'could not cope' within the ordinary education system because of their individual deficits (Pottas, 2005 : 65). The idea of separation between special schools and ordinary schools promoted a traditional view of special needs with the attention on the child with the problem (Carrington, 1999 : 257). This traditional medical model influenced teacher training and beliefs, attitudes and practices in education. It is thus not strange that teachers presently lack adequate skills and knowledge, as well as positive attitudes about inclusive education (Pottas, 2005 : 65).

Studies by Mushoriwa (2001 : 46) and by Avramidis and Norwich (2002 : 137) revealed that gender had an influence on educators attitudes towards inclusive education. Female educators had a positive attitude towards inclusive education than their male counterparts. On the contrary, Avramidis *et al.*, (2000a : 202) found no significant influence of gender on educators' attitudes towards inclusive education.

A study by Avramidis and Norwich (2002 : 137) indicated that educators with fewer years of teaching experience had a positive attitude towards inclusive education than those with many years of teaching experience. This shows that teaching experience has an influence of teachers' attitudes towards inclusive education.

According to a study conducted by Avramidis and Norwich (2002 : 137), high school educators display significantly more positive attitudes towards inclusive education than primary school educators. This indicates that the phase of the school has an influence on educators' attitudes towards inclusive education.

The present study intends to determine whether principals' gender, teaching experience and phase of the school have any influence on their knowledge about inclusive education (aim number two) as well as on their attitudes towards inclusive education (aim number four).

2.5 PRINCIPALS' ATTITUDES TOWARDS INCLUSIVE EDUCATION

Although inclusion of students with special educational needs are becoming a matter of priority in many countries around the world but very few studies have been conducted on the attitudes of principals towards inclusive education.

The focus of the movement to include students with disabilities in general education has recently shifted from viewing inclusion as an innovation within special education towards viewing it within the broader context of school restructuring (Sebba & Ainscow, 1996; Lipsky & Gartner, 1996 : 5 – 7; Cuban, 1988; Riehl, 2000). The mandate to establish inclusive policies and practices related to inclusive education is regarded as a major requirement for

implementing change in schools. Therefore the role of the school principal is important.

The school principal, who serves as an educational leader in school life, plays a major function in implementing change. Fullan (1992), in his research review on school improvement, suggests that a school principal is a primary agent of change and a key figure in promoting or blocking change. More than anyone else it is the school principal who can bring successful school improvement into sharp focus (Fullan & Stiegelbauer, 1991; Hall & Hord, 1987). This view is corroborated by findings from the Rand Change Agent Study in the USA in the early 1970's. Findings from this study revealed that one of the key figures with regard to any educational change is the school principal. Serving in the role of a change agent requires awareness of the essentials of the process involved as well as involvement in immobilizing implementation: principals actions serve to legitimate whether or not a change is to be taken seriously and to support teachers both psychologically and with resources (Fullan & Steigelbaner, 1991 : 76).

Despite the importance of the principal in initiating and maintaining support for change (Fullan & Miles, 1992; Hall & Hord, 1987; Sergivanni, 1995) and the recognition that mainstreaming is one of the more complex changes on the current educational scene (Fullan & Stiegelbauer, 1991 : 41), only few empirical studies have been reported on principals' knowledge and attitudes regarding inclusive educational. Literature review reveals that only 13 research studies

have been published in major special education journals (in English) between the years 1985 and 1999 that focused on the perceptions, attitudes and practice of principals towards inclusion. They were carried out in Canada, Australia and U.S.A. Of these, 5 were studies of principals only; 7 compared both teachers, regular and special education and principals and 1 explored teachers' attribution of principals (Avissar, 2000 : 1).

Overall studies on principal's attitudes regarding inclusion have relieved mixed findings: some showed that they stressed the benefits of inclusion while others revealed a tendency for low expectation of success of inclusive education.

Some of the investigators (Arick & Krug, 1993) noted that principals are expected to provide major support to educators and other staff members in implementing inclusive practices in the school. Interestingly, findings do suggest that principals had more positive attitudes towards inclusion than do teachers (Forlin, 1995). Most principals felt that inclusion could work in their schools but they were not convinced that all the special needs students should be included (Barnet, Monda & Amaya, 1998 : 181 – 193). The severity of the disability – the willingness to include decreases as the level of the disability is more severe (Forlin, 1995).

In a study of Alabama principals (Dyal, Flynt & Bennett-Walker (1996) found that principals were not in favour of inclusive education. A study conducted in Georgia (Livingston, Reed & Good, 2007) arrived at the same conclusion.

Botherson, Sheriff, Milburn and Schertz (2001) investigated the sociopolitical environment and inclusion of young children with disabilities. They found that a gap continues to exist between recommended practices and the reality of early childhood inclusion in the schools. Salisbury and McGregor (2002) studied five elementary school that actively practiced inclusion and found a range of common administrative strategies, core principles and leadership practices which were used by principals to promote inclusive practise.

2.6   CONCLUSION

Education system used to be constructed to include some children and exclude others. The differentiation implied that some children 'could not cope' within the ordinary education system because of their individual deficits. The idea of separation between special schools and ordinary schools promoted a traditional and medical view of special needs as attention was focused on the problem affecting the individual child (Carrington, 1999 : 257 in Pottas, 2005 : 60). This has changed as the focus in South Africa has now moved from the learner having to adjust to the demands of the system, to the system that needs to be flexible enough to accommodate the diverse needs of all learners as inclusively as possible (Department of Education, 1999 : 3).

"The curriculum is a focal point of inclusionary school practices" (Sands *et al.,* 2000 : 293). In a classroom with heterogeneous learners, an education team has the responsibility to consider all possible curriculum content for each learner as learner's learning priorities will vary in complexity, depth and breadth (Ryndak & Alper, 1996 : 56, Villa & Thousand, 1995 : 118).

Assessment, whether formative or summative, is an essential component in the inclusive classroom and should focus on issues of curriculum, instruction and measurement, keeping the learner outcomes in mind (Sands *et al.,* 2000 : 249). Several assessment processes should be implemented in order to provide valid, reliable measures of the learner's performance, and to identify the effects of the teacher instruction on the learner. By doing this, teachers can refine their teaching activities to optimise student learning (Sands *et al.,* 2000 : 249).

Principals are expected to work with varied curricula and methods in delivering instructional services to diverse school populations, certainly their role and attitude towards inclusive practices are keys to the success or failure of inclusion in the individual school (Dyal, *et al.,* 1996 in Livingston, Reed & Good, 2007:2). Therefore, principals' knowledge and attitudes regarding inclusive education has implication on curriculum and assessment.

CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

3.1   INTRODUCTION

In the preceding chapter (chapter two) literature review on inclusive education was reviewed. In this chapter the research methodology used in the investigation of principals' knowledge and attitudes regarding inclusive education will be discussed.

3.2   AIMS OF THE STUDY

The main aim of this study is to investigate principals' knowledge and attitudes regarding inclusive education.

The following specific objectives are formulated:

3.2.1 To ascertain the extent to which principals know about inclusive education and a child with special educational needs.

3.2.2 To determine whether principals' biographical factors (gender, teaching experience and phase of the school) have any influence on their knowledge about inclusive education and a child with special educational needs.

3.2.3 To ascertain the nature of principals' attitudes towards inclusive education.

3.2.4 To determine whether principals' biographical factors (gender, teaching experience and phase of the school) have any influence on their attitudes towards inclusive.

3.2.5 To determine whether there is any relationship between principals' knowledge and attitudes regarding inclusive education.

3.3 FORMULATION OF HYPOTHESES

Based on the aims of the study the following hypotheses are formulated:

3.3.1 Principals do not differ in the extent to which they know about inclusive education and a child with special educational needs.

3.3.2 Principals' biographical factors (gender, teaching experience and phase of the school) have no influence on their knowledge about inclusive education and a child with special educational needs.

3.3.3 Principals' attitude towards inclusive education is neither positive nor negative.

3.3.4 Principals' biographical factors (gender, teaching experience and phase of the school) have no influence on their attitudes towards inclusive education.

3.3.5 There is no relationship between principals' knowledge and attitudes regarding inclusive education.

3.4   THE RESEARCH INSTRUMENT

The quantitative research design was chosen as an appropriate approach for testing hypotheses of the study. To this end, a questionnaire was used as a research instrument for collecting data. A questionnaire was appropriate for reaching a large sample of the targeted population of educators throughout the KwaZulu-Natal Province. It was also appropriate for quantitative analysis of data. However, the questionnaire has its own advantages and disadvantages.

3.4.1 Advantages of the questionnaire

According to Mahlangu (1987 ; 96) the questionnaire is one of the most common methods of gathering information. It is also time saving and conducive to reliable results. The researcher used the written questionnaire as a research instrument taking into consideration certain advantages cited by Cohen and Manion (1989 : 111-112). They are as follows:

- Affordability is the primary advantage of a written questionnaire because it is the least expensive means of data gathering.

- Written questionnaires preclude possible interview bias. The way the interviewer asks questions and even the interviewer's general appearance or interaction may influence respondent's

answers. Such biases can be completely eliminated in the written questionnaire.

- A questionnaire can be given to many people simultaneously, that is to say that a large sample of a targeted population can be reached.

- They permit a respondent, sufficient amount of time to consider answers before responding.

- They provide a greater uniformity across the measurement situations than do the interviews. Each person responds exactly to the same questions because standard instructions are given to the respondents.

- Generally, the data provided by questionnaires can be more easily analysed and interpreted than the data obtained from verbal responses.

- Using a questionnaire solves the problem of non-contact "when the researcher calls". When the target population to be covered is widely and thinly spread, the mail questionnaire is the only possible method of approach.

- Through the use of the questionnaire approach the problems related to interviews may be avoided. Interview "errors" many seriously undermine the reliability and validity of the survey results.

- A respondent may answer questions of a personal or embarrassing nature more willingly and frankly on a questionnaire than in a face to face situation with an interviewer who may be a complete stranger. In some cases it may happen that the respondents report less than expected and make more critical comments in a mail questionnaire.

- Questions requiring considered answers rather than immediate answers could enable respondents to consult documents in the case of the mail questionnaire.

- Respondents can complete questionnaires in their own time and in a more relaxed atmosphere.

- Questionnaire design is relatively easy if the set guides of guidelines are followed.

- The administration of questionnaires, the coding, analysis and interpretation of data can be done without any special training.

• Data obtained from questionnaires can be compared and inferences can be made.

• Questionnaires can elicit information, which cannot be obtained from other sources. This renders empirical research possible in different educational disciplines.

3.4.2 Disadvantages of the questionnaire

Although the questionnaire has advantages it also has disadvantages. According to Van der Aardweg and Van der Aardweg (1988 : 190), Kidder and Judd (1986 : 223 - 224) and Mahlangu (1987 : 84-85) the disadvantages of the questionnaire are *inter alia* the following:

• Questionnaires do not provide the flexibility of interviews. In an interview an idea or comment can be explored. This makes it possible to gauge how people are interpreting the question. If questions asked are interpreted differently by respondents the validity of the information obtained is jeopardized.

• People are generally better able to express their views verbally than in writing.

• Questionnaires can be answered only when they are sufficiently easy and straightforward to be understood with the given instructions and definitions.

- The mail questionnaire does not make provision for obtaining the views of more than one person at a time. It requires uninfluenced views of one person only.

- Answers to mail questionnaires must be seen as final. Re-checking of responses cannot be done. There is no chance of investigating beyond the given answer for a clarification of ambiguous answers. If respondents are unwilling to answer certain questions nothing can be done to it because the mail questionnaire is essentially inflexible.

- In a mail questionnaire the respondent could examine all questions at the same time before answering them and the answer to the different questions could therefore not be treated as 'independent'.

- Written questionnaires do not allow the researcher to correct misunderstanding or answer questions that the respondents may have. Respondents might answer incorrectly or not at all due to confusion or misinterpretation.

3.4.3 The nature of the questionnaire

The questionnaire consists of three sections. The first section (section A) consists of principals' personal particulars. The second section (section B) consists of knowledge questionnaire. The third section C consists of attitude questionnaire.

3.4.4 Sections A of the instrument

Principals' personal particulars included in section A are gender, teaching experience and phase of the school. The reason for including these particulars is that KwaZulu-Natal Province is mixed. There are males and females, those with relatively less teaching experience and those with relatively more teaching experience. There are principals who are heading at foundation phase, intermediate phase, and those heading Senior and Further Education and Training Phases. These differences may influence principals' knowledge and attitudes regarding inclusive education in this study hence the aforementioned variables are included. The respondent is asked to make a cross in the appropriate box provided to indicate his/her gender, teaching experience and phase of the school.

3.4.5 Section B of the instrument

Section B of the research instrument consists of knowledge questionnaire used by Pottas (2005). It was adapted for the present study. This is a two-point scale in which the respondent is asked to indicate whether he/she agree or disagree with the item statements listed (item 1-8) and whether statements are true or false (items 9 – 16). The uncertain category was omitted because many respondents regard it as an easy way out, sometimes for non-committed purpose (Steenkamp, 1984 : 31; Urbani, 1993 : 99). Items 1-8 focus on the principals' knowledge of inclusive education while item 9 – 16 focus on principals' knowledge of a child with special educational needs.

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The respondent is asked to make a cross in the appropriate box at the end of each statement. A score of 2 is assigned to agree/true and 1 to disagree/false in all positively worded statements. A score of 2 is assigned to disagree/false and 1 to agree/true in all negatively worded statements.

3.4.6 Section C of the instrument

Section C consists of attitude questionnaire, which was also used by Pottas (2005) and adapted for the present study. This is a two-point scale in which the respondent is asked to indicate whether he/she agree or disagree with the item statements listed (items 1-30). A score of 2 is assigned to agree and 1 to disagree in all positively worded statements. A score of 2 is assigned to disagree and 1 to agree in all negatively worded statements.

3.4.7 Validity of the instrument

Validity is the degree to which an instrument actually measures what it purports to measure (Sibaya, 1993:160; Muijs, 2004 : 65; Leedy & Ormrod, 2005:28). Content validity and face validity are used in this study. Content validity refers to the representativeness of the sample of questions included in the instrument (Henerson, Morris & Fitz-Gibbon, 1987 : 141; Neuman, 1997 : 142; Cohen, Manion & Marrison, 2000 : 109; Muijs, 2004 : 65). It entails a careful examination and checking of the scale of items, through the use of experts in the field concerned (Muijs, 2004 : 65). Face validity on the

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other hand simply means a cursory examination to show that the instrument does measure what it is intended to measure (Sibaya, 1993 : 167; Muijs, 2004 : 65). It is a judgement by the scientific community that the indicator really measures the construct (Neuman, 1997 : 142). The researcher will in consultation with the promoter, consults experts from the University of Zululand's Faculty of Education for validating the instrument.

3.4.8 Reliability of the instrument

Reliability refers to the degree to which a test is internally consistent (Sibaya, 1993 : 154; Cohen *et al.*, 2000 : 117). One of the special statistical measures to determine internal consistency reliability is Cronbach's co-efficient alpha (Neuman, 1997 : 139; Muijs, 2004 : 73). In order to ensure that items 1-16 (section B) and 1 – 30 (section C) are internally consistent, Cronbach's alpha reliability co-efficient will be calculated. Internal consistency has to do with correlation among the items.

3.5 PLANNING FOR ANALYSIS OF DATA

In this study, the analysis of data involves both descriptive and inferential statistics. Descriptive statistics is used for summarisation and reduction of the data which have been collected on a research sample (Borg & Gall, 1983 : 356; Sibaya, 1993 : 165; Abhilak, 1994 : 216; Neuman, 1997 : 297). Therefore, it does to involve testing of hypotheses for making generalisations about the population

parameters. Inferential statistics on the other hand is used for testing hypotheses, generalising from a sample to make estimates and inferences about a wider population and determining whether differences between groups might be due to chance (Orlich, 1978 : 144; Rowntree, 1981 : 21; Neuman, 1997 : 320; Muijs, 2004 : 75).

Analysis of respondents in the sample according to their personal particulars (Section A of the questionnaire) is done first. Descriptive analysis of the sample data for the 16 statements (section B) and 30 items (section C) of the questionnaire) is then done, using respondent counting and percentages for the responses to each item.

Respondent counting involves counting the number of respondents who marked agree/disagree or true/false categories in each item. In the analysis of the responses to statements on knowledge questionnaire (section B) responses are evaluated as correct or incorrect answers. Decisions about which responses are correct and which ones are incorrect answers are based on information provided by Pottas (2005 : 290). With regard to attitude questionnaire (section C) the responses are accepted as indicative of a positive attitude or a negative attitude (Pottas, 2005 : 298).

Inferential statistics will be used for testing the hypotheses of this study. For each of the two aims (aims number one and three) two categories will be devised. For aim number one these categories, in their ascending order are labelled: Low knowledge level group, and high knowledge level group. For aim number three they are labelled

as negative attitude group and positive attitude group. They were devised by grouping the whole sample's total scores for each aim into two class intervals. An individual's score is determined by one's total score in the scale for each aim. Since there are 16 items for aim number one (with 16 as a possible lowest score (1 x 16) and 32 as a possible highest score (2 x 16) therefore, with scores that could range from 16 to 32 and two response categories the following two categories (groups) are created:

- LKL Group: A Low Knowledge Level Group consists of respondents with scores in the range of 16-24.

- HKL Group: A High Knowledge Level Group consists of respondents with scores in the range of 25-32.

Since there are 30, items for aim number three (with 30 as a possible lowest score (1 x 30) and 60 as a possible highest score (2 x 30) therefore the following two categories (groups) are created:

- NA group : A Negative Attitude Group consists of respondents with scores in the rage of 30-45.
- PA group: A Positive Attitude Group consists of respondents with scores in the range of 46-60.

To this end, the chi-square one sample test will be used to test hypotheses for aims number one, and three of this study. The chi-square test is the most frequently used non-parametric statistical test of

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significance. The chi-square test of significance is used when the investigation concerns category variables, that is, comparing how many members of a sample fall into each one of a number of descriptive categories. The chi-square test is concerned with comparing differences in the actual (observed) frequencies (counts) with the expected frequencies. The chi-square test tells us the extent to which an observed set of frequencies differs from the frequencies that are expected (Orlich, 1978 : 145; Borg & Gall, 1973 : 559; Behr, 1988 : 79).

In this study, the researcher has in a single sample, two categories, namely, LKL and HKL. The researcher intends to test whether significant differences exist between the observed frequencies and the expected frequencies in these respective categories. This type of chi-square test is called one sample test (Behr, 1988 : 82; Sibaya, 1993 : 259).

The chi-square test for k independent samples will be used to test hypotheses for aims number two and four. This statistical test is suitable for testing hypotheses for these aims because the respondents in the sample are categorised in terms of their personal particulars and their responses are considered independently. For example, the category of gender, males and females responses are treated independently of each other.

All the four research hypotheses are based on the null hypotheses. Therefore, if there is no significant difference between the frequencies in the respective categories, the null hypotheses will not be rejected but

if there are differences, they will be rejected. The null hypotheses are rejected at 0.05 level of significance, which means that the likelihood of the results occurring by chance is less than 5 times in 100. If the calculated probability value of the results (p) is greater than 0.05 level of significance, the null hypothesis is accepted. This is recorded as $p > 0.05$. If it is less, the null hypothesis is rejected. This is recorded as $p < 0.05$ (Sibaya., 1993 : 257).

The fifth aim is to determine whether there is any relationship between principals' knowledge and attitudes regarding inclusive education. Since both the knowledge and attitude questionnaires are expressed as two sets of continuous scores, calculation of the Pearson-Product moment correlation coefficient (r) between the two scales is possible, the Pearson-Product moment correlation coefficient (r) is used when both variables that are correlated are expressed as continuous scores (Borg & Gall, 1983 : 586; Bless & Kathura, 1993 : 284).

3.6   SAMPLE DESIGN AND SAMPLING PROCEDURE

The respondents for this study were drawn from mainstream schools in the KwaZulu-Natal Province. KwaZulu-Natal Province consists of four regions. These regions in their alphabetical order are: eThekwini, uKhahlamba, uMgungundlovu and Zululand. Simple random sampling method was used to select Zululand region, which has three districts, namely, Empangeni, Obonjeni and Vryheid and to select Obonjeni district. Schools within this district were used for drawing a sample of principals for this study.

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3.7 PLANNING FOR ADMINISTRATION OF THE RESEARCH INSTRUMENT

This study was conducted in the form of a field study. The procedure which was followed is outlined below:

a) A letter requesting for permission to conduct research in selected schools was forwarded to the District Director of Obonjeni district.

b) Copies of the letter of approval were made and they accompanied the questionnaire to principals. Questionnaires were personally distributed and collected from schools.

c) A pilot run of the research instrument was conducted among principals from schools in the Obonjeni district. These schools were not included in the final study sample for the main study. Included in the pilot study were 30 principals, comprising of 19 males and 11 females. There were 15 principals from each of the combined phases, namely Foundation and Intermediate phase, Senior and FET phase. These phases were combined because principals were heading schools in the combined phases. The pilot study helped in highlighting problem areas before the research instrument was used in the final study.

3.8 CONCLUSION

In this chapter, the aims and hypotheses of the study were outlined. The research instrument, planning for analysis of data, sample design and sampling procedure as well as planning for the administration of the research instrument have been discussed.

In the next chapter (chapter four) data is presented, analysed and interpreted. The findings of the study are also discussed.

CHAPTER FOUR
PRESENTATION AND ANALYSIS OF DATA

4.1 INTRODUCTION

In chapter three a detailed account of research design and methodology was given. In this chapter the analysis and interpretation of data are discussed. Descriptive statistics is used to summarise principals' responses to the statements without testing the hypotheses of the study. Inferential statistics is used to test the hypotheses postulated in chapter three.

4.2 ADMINISTRATION OF THE RESERCH INSTRUMENT

The SPSS computer programme was used for analysing data. Cronbach's co-efficient alpha was used to determine the internal-consistency reliability estimates for items 1-16 (Section B), which is a knowledge questionnaire and for items 1-30 (Section C), which is an attitude questionnaire. The internal-consistency reliability estimate for knowledge questionnaire is 0.71 and for attitude questionnaire is 0.74, which is excellent (Tabachnick & Fidell, 1989:640). An instrument with co-efficient alpha measure which is over 0.70 is regarded as internally consistent (Muijs, 2004 : 73).

TABLE 4.1   Distribution of subjects according to biographical variables (N = 202)

Criteria	Levels				
	Male				Female
	120				92
Teaching Experience in years:	0-4	5-9	10-14	15-19	20+
	14	20	79	72	27
Phase of the School	Foundation/Intermediate			Senior/FET	
	95			117	

Table 4.1 illustrates the distribution of principals according to their biographical characteristics. The questionnaire was administered to 202 principals.

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4.3 RESULTS OF THE STUDY

4.3.1 Descriptive analysis of data

TABLE 4.2   Frequency distribution of responses to items 1-16 of the knowledge questionnaire (N = 212)

Statement No.	Response		Decision	
	Correct Answer	Response	Incorrect Answer	Response
+1.	198 (93.4)	Agree	14 (6.6)	Disagree
+2.	178 (84.0)	Agree	34 (16.0)	Disagree
+3.	175 (82.5)	Agree	37 (17.5)	Disagree
+4.	170 (80.2)	Agree	42 (19.8)	Disagree
+5.	165 (77.8)	Agree	47 (22.2)	Disagree
+6.	155 (73.1)	Agree	57 (26.9)	Disagree
+7.	146 (68.9)	Agree	66 (31.1)	Disagree
-8.	128 (60.4)	Disagree	84 (39.6)	Agree
-9.	104 (49.1)	False	108 (50.9)	True
-10.	119 (56.1)	False	93 (43.9)	True
-11.	131 (61.8)	False	81 (38.2)	True
-12.	121 (57.1)	False	91 (42.9)	True
-13.	117 (55.2)	False	95 (44.8)	True
-14.	130 (61.3)	False	82 (38.7)	True
-15.	90 (42.5)	False	122 (57.5)	True
-16.	102 (48.1)	False	110 (51.9)	True

*Percentages are in parentheses.
+ Positively worded statements (scoring 2,1)
-Negatively worded statements (scoring 1,2)

Table 4.2 reveals the following information pertaining respondents' responses to each statement on how educators would accommodate learners with special educational needs in their classes in the mainstream schools:

Statement 1:   *By adjusting their classroom to facilitate stimulating learning environment*

This is a positively worded statement. Table 4.2 reveals that 198 (93.4%) respondents answered correctly by indicating that they agree with the statement. Only 14 (6.6%) answered it incorrectly by indicating that they, disagree with it.

Statement 2 :   *By adjusting their teaching to facilitate a creative learning environment*

It is a positively worded statement. Table 4.2 shows that 178 (84.0%) respondents answered correctly by indicating that they agree with the statement while 34 (16.0%) answered incorrectly by indicating that they disagree with it.

Statement 3:   *By acknowledging the different needs of all children irrespective of their age*

This statement is positively worded. Table 4.2 reveals that 175 (82.5%) respondents answered correctly by indicating that they agree with the statement while 37 (17.5%) answered incorrectly by indicating that they disagree with it.

Statement 4: By acknowledging the different needs of all children
irrespective of their language

The above statement is positively worded. According to table 4.2, 170 (80.2%) respondents answered correctly by indicating that they agree with the statement while 42 (19.8%) answered incorrectly by indicating that they disagree with it.

Statement 5:   *By acknowledging the different needs of all children*
irrespective of their disability

This is a positively worded statement. Table 4.2 shows that 165 (77.8%) respondents answered correctly by indicating that they agree with the statement while 47 (22.2%) answered incorrectly by indicating that they disagree with it.

Statement 6:   *By collaborating with professional service providers*

It is a positively worded statement. Table 4.2 reveals that 155 (73.1%) respondents answered correctly by indicating that they agree with the statement while 57 (26.9%) answered incorrectly by indicating that they disagree with it.

Statement 7:   *By involving parents in the decision making process concerning how to handle their children*

This is a positively worded statement. According to table 4.2, 146 (68.9%) respondents answered correctly by indicating that they agree with the statement while 66 (31.1%) answered incorrectly by indicating that they disagree with it.

Statement 8:   *By recommending that the child be transferred to a special school*

This statement is negatively worded. Table 4.2 shows that 128 (60.4%) respondents answered correctly by indicating that they disagree with the statement and 84 (39.6%) answered incorrectly by indicating that they agree with it.

Table 4.2 reveals the following information pertaining respondents' responses to each statement about a child with special educational needs:

Statement 9:   *The intellectual abilities of a child with special educational needs always differ from a normal child*

The above statement is negatively worded. Table 4.2 reveals that 104 (49.1%) respondents answered correctly by indicating that the statement is false. A relatively high number, 108 (50.9%) of the

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respondents answered incorrectly by indicating that the statement is true.

Statement 10:   *A child with a special educational need **always** experiences difficulty in adapting to his/her social environment*

This is a negatively worded statement. Table 4.2 reveals that 119 (56.1%) respondents answered correctly by indicating that the statement is false while 93 (43.9%) answered incorrectly by indicating that the statement is true.

Statement 11:   *A child with a special educational need **never** gives appropriate answers when questions are asked.*

The above statement is negatively worded. According to table 4.2, 131 (61.8%) respondents answered correctly by indicating that the statement is false while 81 (38.2%) answered incorrectly by indicating that it is true.

Statement 12:   *The attentiveness of a child with a special educational need is **always** weaker than that of a normal child*

This statement is negatively worded. Table 4.2 shows that 121 (57.1%) respondents answered correctly by indicating that the statement is false while 91 (42.9%) answered incorrectly by indicating that the statement is true.

Statement 13:   *A child with a special educational need **always** has a*
                   poor reading abilities

It is a negatively worded statement. Table 4.2 reveals that 117 (55.2%) respondents answered correctly by indicating that the statement is false while 95 (44.8%) answered incorrectly by indicating that it is true.

Statement 14:   *A child with a special educational need can **never** function independently within the classroom*

This is negatively worded statement. According to table 4.2, 130 (61,3%) respondents answered correctly by indicating that the statement is false while 82 (38.7%) answered incorrectly by indicating that it is true.

Statement 15:   *A child with a special educational need **always** needs additional assistance from the teacher*

The above statement is negatively worded. Table 4.2 shows that 90 (42.5%) respondents answered correctly by indicating that the statement is false. A relatively high number, 122 (57.5%) of the respondents answered incorrectly by indicating that the statement is true.

Statement 16:   *The academic progress of a child with a special educational need is **always** weaker compared to a normal child of the same age*

This is a negatively worded statement. Table 4.2 reveals that 102 (48.1%) respondents answered correctly by indicating that the statement is false. A relatively high number, 110 (51.9%) of the respondents answered incorrectly by indicating that the statement is true.

TABLE 4.3   **Frequency distribution of responses to items 1-30 of the attitude questionnaire (N = 212)**

Statement No.	Response		Decision	
	Negative Attitude	Response	Positive Attitude	Response
-1.	108 (50.9)	Agree	104 (49.1)	Disagree
+2.	116 (54.7)	Disagree	96(45.3)	Agree
-3.	74 (34.9)	Agree	138(65.1)	Disagree
-4.	77 (36.3)	Agree	135(63.7)	Disagree
+5.	53 (25.0)	Disagree	159(75.0)	Agree
+6.	42 (19.8)	Disagree	170(80.2)	Agree
-7.	74 (34.9)	Agree	138(65.1)	Disagree
+8.	49 (23.1)	Disagree	163(76.9)	Agree
-9	87 (41.0)	Agree	125(59.0)	Disagree
+10.	111 (52.4)	Disagree	101(47.6)	Agree
-11.	73 (34.4)	Agree	139(65.6)	Disagree
-12	145 (68.4)	Agree	67(31.6)	Disagree
-13.	134 (62.9)	Agree	78(36.8)	Disagree
-14.	90 (42.5)	Agree	122(57.5)	Disagree
-15.	130 (61.3)	Agree	82(38.7)	Disagree
-16.	138 (65.1)	Agree	74(34.9)	Disagree
-17.	132 (62.3)	Agree	80(37.7)	Disagree
-18.	87 (41.0)	Agree	125(59.0)	Disagree
+19.	41 (19.3)	Disagree	171(80.7)	Agree
+20.	36 (17.0)	Disagree	176(83.10)	Agree
+21.	50 (23.6)	Disagree	162(76.4%	Agree
+22.	31 (14.6)	Disagree	181(85.4)	Agree
-23.	144 (67.9)	Agree	68(32.1)	Disagree
-24.	84 (39.6)	Agree	128(60.4)	Disagree
-25.	72 (34.0)	Agree	140(66.0)	Disagree
-26.	167 (78.8)	Agree	45(21.2)	Disagree
-27.	102 (48.1)	Agree	110(51.9)	Disagree
-28.	138 (65.1)	Agree	74(34.9)	Disagree
+29.	86 (40.6)	Disagree	126 (59.4)	Agree
+30.	39 (18.4)	Disagree	173(81.6)	Agree

*Percentages are in parentheses.
+ Positively worded statements (scoring 2,1)
-Negatively worded statements (scoring 1,2)

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Table 4.3 reveals the following information pertaining respondents' responses to each statement regarding their attitudes towards the inclusion of children with special educational needs in mainstream school classes.

Statement 1:   *The inclusion of children with special educational needs into regular classes will lead to a lowering of present standards in the school*

This is a negatively worded statement. Table 4.3 reveals that 108 (50.9%) respondents reported a negative attitude response by indicating that they agree with the statement while 104 (49.1%) reported a positive attitude by indicating that they disagree with it.

Statement 2:   *A child with special educational need can receive a better quality of education at a regular school than at a special school*

It is a positively worded statement. Table 4.3 shows that 116 (54.7%) reported a negative attitude response by indicating that they disagree with the statement while 96 (45.3%) reported a positive attitude response by indicating that they agree with it.

Statement 3:   *Most children with special educational needs would not cope academically in a regular school*

The above statement is negatively worded. Table 4.3 indicates that 74 (34.9%) respondents reported a negative attitude responses by indicating that they agree with the statement while a high number, 138 (65.1%) of the respondents reported a positive attitude by indicating that they disagree with it.

Statement 4:   *Separate education for children with special educational needs has been effective and should not be changed*

This is a negatively worded statement. Table 4.3 reveals that 77 (36.3%) respondents reported a negative attitude response by indicating that they agree with the statement while a high number, 135 (63.7%) of the respondents reported a positive attitude by indicating that they disagree with it.

Statement 5:   *Children with special educational needs should be given every opportunity to function in a regular class, where possible.*

It is a positively worded statement. Table 4.3 shows that 53 (25.0%) respondents reported a negative attitude responses by indicating that they disagree with the statement while a very high number, 158 (75.0%) of the respondents reported a positive attitude by indicating that they agree with it.

Statement 6:   *The regular class can be the least restrictive environment for the child with special educational needs*

This statement is positively worded. Table 4.3 indicates that 42 (19.8%) respondents reported a negative attitude response by indicating that they disagree with the statement while a very high number, 170 (80.2%) reported a positive attitude by indicating that they agree with it.

Statement 7:   *The inclusion of children with special educational needs into regular school is not very practical*

The above statement is negatively worded. Table 4.3 reveals that 74 (34.9%) respondent reported a negative attitude by indicating that they agree with the statement while a high number, 138 (65.1%) reported a positive attitude by indicating that they disagree with it.

Statement 8:   *Inclusion is likely to foster greater understanding and acceptance of differences between the learners*

This is positively worded statement. Table 4.3 shows that 49 (23.1%) respondents reported a negative attitude response by indicating that they disagree with the statement while a very high number, 163 (76.9%) reported a positive attitude by indicating that they agree with it.

Statement 9: *Special schools for the children with special educational needs are the most appropriate places for them to be educated*

It is a negatively worded statement. Table 4.3 indicates that 87 (41.0%) respondents reported a negative attitude response by indicating that they agree with the statement while 125 (59.0%) reported a positive attitude by indicating that they disagree with it.

Statement 10: *Children with special educational needs who are included in regular schools have a greater ability to function there than those who attend special schools*

This is a positively worded statement. Table 4.3 reveals that 111 (52.4%) respondents reported a negative attitude response by indicating that they disagree with the statement while 101 (47,6%) reported a positive attitude by indicating that they agree with it.

Statement 11: *Inclusion is likely to have a negative effect on the emotional development of a child with special educational needs*

It is a negatively worded statement. Table 4.3 indicates that 73 (34.4%) reported a negative attitude response by indicating that they agree with the statement while a high number, 139 (65.6%) reported a positive attitude by indicating that they disagree with it.

Statement 12:   *Children with special educational needs are likely to be isolated by their peers in regular schools*

This is a negatively worded statement. Table 4.3 shows that 145 (68.4%) reported a negative attitude response by indicating that they agree with the statement while 67 (37.6%) reported a positive attitude by indicating that they disagree with it.

Statement 13:   *Included children with special educational in regular schools are likely to experience stigma attached to their disability than those who are educated with other peers in special schools*

The above statement is negatively worded. Table 4.3 reveals that 134 (62.9%) respondents reported a negative attitude response by indicating that they agree with the statement while 78 (36.8%) reported a positive attitude by indicating that they disagree with it.

Statement 14:   *Regular contact with a child with a special educational need is potentially harmful for children without special educational needs*

It is a negatively worded statement. Table 4.3 indicates that 90 (42.5%) respondents reported a negative attitude response by indicating that they agree with the statement while 122 (57.5%) reported a positive attitude by indicating that they disagree with it.

Statement 15:   *I feel frustrated because I don't know how to help a child with a special educational need*

This is a negatively worded statement. Table 4.3 shows that 130 (61.3%) respondents reported a negative attitude response by indicating that they agree with the statement while 82 (38.7%) reported a positive attitude by indicating that they disagree with it.

Statement 16:   *I feel uninformed towards a child with a special educational needs*

The above statement is negatively worded. Table 4.3 reveals that 138 (65.1%) respondents reported a negative attitude response by indicating that they agree with the statement while 74 (34.9%) reported a positive attitude by indicating that they disagree with it.

Statement 17:   *I feel uncomfortable in the presence of a child with a special educational need*

It is a negatively worded statement. Table 4.3 indicates that 132 (62.3%) respondents reported a negative attitude response by indicating that they agree with the statement while 80 (37.7%) reported a positive attitude by indicating that they disagree with it.

Statement 18:   *I tend to ignore a child with a special educational need*

This is a negatively worded statement. Table 4.3 reveals that 87 (41.0%) respondents reported a negative attitude response by indicating that they agree with the statement while 125 (59.0%) reported a positive attitude by indicating that they disagree with it.

Statement 19:   *Interaction with normal children is likely to enable a child with a special educational need to develop a better self image.*

This is a positively worded statement. Table 4.3 shows that 41 (19.3%) respondents reported a negative attitude response by indicating that they disagree with the statement while a very high number, 171 (80.7%) reported a positive attitude by indicating that they agree with it.

Statement 20:   *Children in regular classes are likely to develop a greater degree of acceptance of others with special needs through contact with them*

The above statement is positively worded. Table 4.3 indicates that 36 (17.0%) respondents reported a negative attitude response by indicating that they disagree with the statement while a very high number, 176 (83.0%) reported a positive attitude by indicating that they agree with it.

Statement 21:   *The challenge of being in a regular classroom is likely to promote the academic growth of the child with a special educational need*

It is a positively worded statement. Table 4.3 reveals that 50 (23.6%) respondents reported a negative attitude response by indicating that they disagree with the statement while a very high number, 162 (76.4%) reported a positive attitude by indicating that they agree with it.

Statement 22:   *The adjustments made by teachers to accommodate children with special educational needs are likely to benefit most normal learners in class*

This is a positively worded statement. Table 4.3 shows that 31 (14.6%) respondents reported a negative attitude response by indicating that they disagree with the statement while a vey high number, 181 (85.4%) reported a positive attitude by indicating that they agree with it.

Statement 23:   *Children with special educational needs require additional individual attention that would be to the demerit of the other learners.*

The above statement is negatively worded. Table 4.3 indicates that 144 (67.9%) respondents reported a negative attitude response by indicating that they agree with the statement while 68 (32.1%) reported a positive attitude by indicating that they disagree with it.

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Statement 24:   *It would be more difficulty to maintain order in a regular class that includes a child with a special educational need*

It is a negatively worded statement. Table 4.3 reveals that 84 (39.6%) respondents reported a negative attitude response by indicating that they agree with the statement while a high number, 128 (60.4%) reported a positive attitude by indicating that they disagree with it.

Statement 25 :   *The behaviour of children with special educational needs is likely to set a bad example for the rest of the class*

This is a negatively worded statement. Table 4.3 shows that 72 (34.0%) reported a negative attitude response by indicating that they agree with the statement while a high number, 140 (66.0%) reported a positive attitude by indicating that they disagree with it.

Statement 26:   *A child with special educational needs' classroom behaviour requires more patience than a normal child*

The above statement is a negatively worded. Table 4.3 indicates that 167 (78.8%) respondents reported a negative attitude response by indicating that they agree with the statement while 45 (21.2%) reported a positive attitude by indicating that they disagree with it.

Statement 27:   *Regular school teachers should not be expected to teach*
                      children with special educational needs

It is a negatively worded statement. Table 4.3 reveals that 102 (48.1%) respondents reported a negative attitude response by indicating that they agree with the statement while 110 (51.9%) reported a positive attitude by indicating that they disagree with it.

Statement 28:   *Having a child with a special educational need in my*
                      school would require too much effort

This is a negatively worded statement. Table 4.3 shows that 138 (65.1%) respondents reported a negative attitude response by indicating that they agree with the statement while 74 (34.9%) reported a positive attitude by indicating that they disagree with it.

Statement 29:   *Regular teachers have the basic techniques to teach any*
                      children, including children with special educational
                      needs

The above statement is positively worded. Table 4.3 indicates that 86 (40.6%) respondents reported a negative attitude response by indicating that they disagree with the statement while 126 (59.4%) reported a positive attitude by indicating that they agree with it.

Statement 30:   *I am willing to allow a professional person in my school in order to support the inclusion of a child with special educational need*

It is a positively worded statement. Table 4.3 reveals that 39 (18.4%) respondents reported a negative attitude response by indicating that they disagree with the statement while a very high number 173 (81.6%) reported a positive attitude by indicating that they agree with it.

4.3.2 Analysis of data using inferential statistics

In this section, hypotheses are tested and the results are presented in the tables. There are five hypotheses to be tested in this study. The presentation of data (in the tables) is preceded by the reiteration of each hypothesis.

4.3.2.1   Testing of hypothesis number one

Hypothesis number one is reiterated as follows:

Principals do not differ in the extent to which they know about inclusive education and a child with special educational needs.

The appropriate statistical test chosen for testing this hypothesis is the chi-square one sample test. The chi-square one sample test is appropriate because testing hypothesis number one is concerned with comparing how many respondents of the whole sample fall into each of the descriptive

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categories, namely, Low Knowledge Level (LKL) and High Knowledge Level (HKL).

The chi-square one sample test is recommended for comparing differences in the observed frequencies with the expected frequencies in a single sample with various categories to determine whether differences (except for sample error) are typical of the population from which the sample was drawn (Behr, 1988 : 82).

TABLE 4.4   **Group and knowledge levels**

	LKL (16-24)	HKL (25-32)
Frequencies	74	138

A chi-square value of 19.321 at df = 1 was obtained for table 4.4. It is significant at our chosen level of significance, which is 0.05. Since $p<0.5$, the decision is to reject the null hypothesis and conclude that principals differ in the extent to which they know about inclusive education and a child with special educational needs.

4.3.2.2 Testing of hypothesis number two

Hypothesis number two is reiterated as follows:

Principals' biographical factors such as gender, teaching experience, and phase of the school have no influence on their knowledge about inclusive education and a child with special educational needs.

The chi-square test for k independent samples is chosen as an appropriate statistical test for testing this hypothesis. The chi-square test for k independent samples is appropriate because the respondents in the sample are categorised in terms of their personal particulars and their responses are considered independently.

Table 4.5 **Gender and knowledge levels**

Gender	LKL (16-24)	HKL (25-32)
Male	36	84
Female	38	54

A chi-square value of 2.929 at df = 1 was obtained for table 4.5. It is not significant at our chosen level of significance, which is 0.05. Since p>0.05, the decision is to uphold the null hypothesis and conclude that gender has *no* influence on principals' knowledge about inclusive education and a child with special educational needs.

TABLE 4.6   Teaching experience and knowledge levels

Teaching experience: in years	LKL (16-24)	HKL (25-32)
0-4	4	10
5-9	7	13
10-14	20	59
15-19	37	35
20 +	6	21

A chi-square value of 13.965 at df = 4 was obtained for table 4.6. It is significant at our chosen level of significance, which is 0.05. Since p<0.05, the decision is to reject the null hypothesis and conclude that teaching experience has an influence on principals' knowledge about inclusive education and a child with special education needs.

TABLE 4.7   Phase of the school and knowledge levels

Teaching Phase	LKL (16-24)	HKL (25-32)
Foundation/Intermediate	32	63
Senior/FET	42	75

A chi-square value of 0.113 at df = 1 was obtained for table 4.7. It is not significant at our chosen level of significance, which is 0.05. Since p>0.05, the decision is not to reject the null hypothesis and conclude that the phase of the school has no influence on principals' knowledge about inclusive education and a child with special educational needs.

4.3.2.3   Testing of hypothesis number three

Hypothesis number three is reiterated as follows:

Principals' attitude towards inclusive education is neither positive nor negative.

The appropriate statistical test chosen for testing this hypothesis is also the chi-square one sample test.

TABLE 4.8   **Group and attitude**

	NA (30-45)	PA (46-60)
Frequencies	83	129

A chi-square value of 9.981 at df = 1 was obtained for table 4.8. It is significant at our chosen level of significance, which is 0.05. Since p< 0.05, the decision is to reject the null hypothesis and conclude that principals hold a positive attitude towards inclusive education.

4.3.2.4 Testing of hypothesis number four

Hypothesis number four is reiterated as follows:

Principals' biographical factors such as gender, teaching experience and phase of the school have no influence on their attitude towards inclusive education.

The chi-square test for k independent samples is also appropriate for testing this hypothesis.

TABLE 4.9   **Gender and attitude**

Gender	LKL (30-45)	HKL (46-60)
Male	45	75
Female	38	54

A chi-square value of 0.316 at df = 1 was obtained for table 4.9. It is not significant at our chosen level of significance, which is 0.05. Since p > 0.05, the decision is to uphold the null hypothesis and conclude that gender has no influence on principals' attitude towards inclusive education.

TABLE 4.10   **Teaching experience and attitude**

Teaching experience: in years	NA (30-45)	PA (45-60)
0-4	5	9
5-9	7	13
10-14	27	52
15-19	37	35
20 +	7	20

A chi-square value of 7.543 at df = 4 was obtained for table 4.10. It is not significant at our chosen level of significance, which is 0.05. Since p>0.05, the decision is not to reject the null hypothesis and conclude that teaching experience has no influence on principals' attitude towards inclusive education.

TABLE 4.11   **Phase of the school and attitude**

Teaching Phase	LKL (30-45)	HKL (46-60)
Foundation/Intermediate	36	59
Senior/FET	47	70

A chi-square value of 0.114 at df = 1 was obtained for table 4.11. It is not significant at our chosen level of significance, which is 0.05. Since p>0.05, the decision is not to reject the null hypothesis and conclude that phase of the school has no influence on principals' attitude towards inclusive education.

4.3.2.5 Testing of hypothesis number five

Hypothesis number five is reiterated as follows:

There is no relationship between principals' knowledge and attitudes regarding inclusive education.

The appropriate statistical test chosen for this hypothesis is the Pearson product moment correlation coefficient (r). The Pearson correlation (r)

is appropriate because the scores for both knowledge and attitudes regarding inclusive education in this study are expressed as continuous data. The Pearson correlation (r) is recommended where both variables that are correlated are expressed as continuous variables (Borg & Gall, 1983 : 589; Bless & Kathura, 1993 : 284).

TABLE 4.12   **Correlation between principals' knowledge and attitudes regarding inclusive education**

N	Correlation	Significance level
212	0.52	0.01

According to Table 4.12 there is a significant positive correlation between principals' knowledge and attitudes regarding inclusive education. Therefore, the null hypothesis is rejected.

4.4   DISCUSSION OF THE RESULTS

4.4.1 Results from descriptive statistics

Table 4.2 reveals that out of sixteen items on the knowledge about inclusive education and a child with special educational needs, thirteen of them (81.2%) were answered correctly by the majority of the respondents and only three (18.8%) were answered incorrectly. This is indicative of principals' sufficient knowledge about inclusive educational and a child with special educational needs.

The three items that were answered incorrectly are 9, 15 and 16. The majority of the respondents indicated that the intellectual abilities of a child with a special educational need **always** differ from those of a normal child (item 9). They also indicated that a child with a special educational need **always** needs additional assistance from the teacher (item 15). They further indicated that the academic progress of a child with a special educational need is **always** weaker compared to a normal child of the same age (item 16).

Table 4.3 reveals that out of thirty items on the attitude towards inclusive education, nineteen of them (63.3%) elicited a positive response from the majority of the respondents while eleven (36.7%) elicited a negative response. This is indicative of a positive attitude towards inclusive education.

4.4.2 Results from inferential statistics

4.4.2.1 Findings with regard to the extent to which principals know about inclusive education and a child with special educational needs.

The findings reveal that principals differ in the extent to which they know about inclusive education and a child with special educational needs. A high percentage (65.1%) of principals report a high knowledge level about inclusive education and a child with special educational needs compared to those who reported a low knowledge

level (34.9%). These findings are in accord with those of Pottas (2005).

4.4.2.2   Findings with regard to the influence of principals' biographical characteristics on their knowledge about inclusive education and a child with special educational needs

The findings indicate that teaching experience has an influence on principals' knowledge about inclusive education and a child with special educational needs. Principals with less than 15 years and more than 19 years of teaching experience have higher knowledge about inclusive education and a child with special educational needs than those with more than 15 years and less than 19 years. This means that principals at the earlier years and later years of teaching experience have sufficient knowledge about inclusive education and a child with special educational needs.

4.4.2.3   Findings with regard to principals' the nature of attitude towards inclusive education

The findings show that a high percentage (60.8%) of principals hold a positive attitude towards inclusive education compared to those who hold a negative attitude (39.2%). These findings are contrary to those reported in studies of other countries (Dyal *et al.*, 1996; Livingston *et al.*, 2007) and in accord with those of Forlin (1995); Avissar (2000).

4.4.2.4 Findings with regard to the influence of principals' biographical characteristics on their attitudes towards inclusive education

The findings reveal that gender, teaching experience and phase of the school have no influence on principals' attitudes towards inclusive education. This means that principals' attitude is not dependent on these factors.

4.4.2.5 Findings with regard to the relationship between principals' knowledge and attitude regarding inclusive education

The findings indicate that principals' knowledge about and attitudes towards inclusive education are related. This means that the more principals know about inclusive education the more they have a positive attitude towards it.

4.5   CONCLUSION

In this chapter both descriptive and inferential statistic were used to analyse data. Descriptive statistics was used to analyse principals' responses to each item without testing the hypotheses. On the other hand, inferential statistics was used to test the hypotheses of the study. The latter was done for the purpose of making inferences from the findings of the study. The data was presented, analysed and interpreted. The findings were also discussed.

In the next chapter (chapter five), the summary, conclusions and recommendations of the study are presented.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

4.1 SUMMARY

4.1.1 The problem

The study was designed to investigate principals' knowledge and attitudes regarding inclusive education. To this end, the problem was stated as follows:

i)   To what extent do principals know about inclusive education and a child with special educational needs?

ii) Do principal's biographical factors (gender, teaching experience and phase of the school) have any influence on their knowledge about inclusive education and a child with special educational needs?

iii) What is the nature of principals' attitudes towards inclusive education?

iv) Do principals' biographical factors (gender, teaching experience and phase experience of the school) have any influence on their attitudes towards inclusive education?

v)   Is there any relationship between principals' knowledge and attitudes regarding inclusive education?

5.1.2   The aims of the study

i)   To ascertain the extent to which principals know about inclusive education and a child with special educational needs.

ii)   To determine whether principals' biographical factors (gender, teaching experience and phase of the school) have any influence on their knowledge about inclusive education and a child with special educational needs.

iii)   To ascertain the nature of principals' attitudes towards inclusive education.

iv)   To determine whether principals' biographical factors (gender, teaching experience and phase of the school) have any influence on their attitudes towards inclusive.

v)   To determine whether there is any relationship between principals' knowledge and attitudes regarding inclusive education.

5.1.3   Hypotheses postulated

Based on the aims of the study the following hypotheses are formulated:

i)   Principals' do not differ in the extent to which they know about inclusive education and a child with special educational needs.

ii)   Principals' biographical factors (gender, teaching experience and phase of the school) have no influence on their knowledge about inclusive education and a child with special educational needs.

iii) Principals' attitude towards inclusive education is neither positive nor negative.

iv) Principals' biographical factors (gender, teaching experience and phase of the school) have no influence on their attitudes towards inclusive education.

v) There is no relationship between principals' knowledge and attitudes regarding inclusive education.

5.1.4 Methodology

A questionnaire, with knowledge of and attitudes towards inclusive education items was used as a research instrument for collecting data. The instrument was administered to a randomly selected sample of 212 principals. Both descriptive and inferential statistics were used for anlysing data. Respondent counting and percentages were used for descriptive analysis in the item by item analysis of data. The chi-square one sample test and the chi-square test for k independent samples are appropriate statistical tests which were used for testing the first four hypotheses of the study. The Pearson product moment correlation coefficient (r) was used to test the last hypothesis.

5.2 CONCLUSIONS

The results of the study led to the following conclusions:

i) Principals differ in the extent to which they know about inclusive education and a child with special educational needs.

ii)   Principals' teaching experience has an influence on their knowledge about inclusive education and a child with special educational needs.

iii)   Principals have a positive attitude towards inclusive education.

iv)   Principals biographical factors (gender, teaching experience and phase of the school) have no influence on their attitudes towards inclusive education.

v)   There is a relationship between principals' knowledge about and attitudes regarding inclusive education.

5.3   RECOMMENDATIONS

The findings of this study have implications for curriculum and assessment. The findings that principals in this study have sufficient knowledge about inclusive education and a child with special educational needs as well as that they have a positive attitude towards inclusive education are good news. These findings imply that having principals with sufficient knowledge about and positive attitude towards inclusive education, the curriculum and assessment can successfully be adjusted to accommodate learners with special educational needs in the mainstream schools as required by the White Paper 6. Principals, as leaders of the schools, are the key to the successful implementation of inclusive education. Without the guidance and support from them, teachers may not adjust their curriculum and allow more time for assessment to accommodate learners with special educational needs in their classes.

5.3.1 Recommendations to the Department of Education

In the light of the findings of this study, the following recommendations are made to the Department of Education:

i)   The department must capitalise on the knowledge and attitude of principals to implement the inclusive education policy.

ii)   An attempt should be made to ensure that the level of principals' sufficient knowledge and positive attitude is maintained and sustained.

iii)   An attempt should be made to ensure that the same level of knowledge and attitude is shared by the teachers.

iv)   Visits should be made to schools to support principals and teachers on implementing inclusive education.

5.3.2   Limitations of the study and avenues for further research

The following limitations of the study are highlighted and recommendations for directing future research are made:

i)   The sample of this study was drawn from principals of Obonjeni district only, therefore, it is not representative of the entire population of principals in the KwaZulu-Natal and other provinces in the country. Further studies need to be conducted in the other provinces.

ii)   Only public schools were target population in this study. Further research focusing on private schools is needed.

iii)   The sample of this study consisted of 212 principals. More research, with a bigger sample, preferably a provincial or nationwide study is essential.

iv)   The sample of this study focused on principals. Further research focusing on teachers is needed.

v)   The questionnaire used in this study focused on special educational needs in general. A questionnaire specific to a particular special educational need is essential.

vi)   Only the questionnaire was used as a research instrument in this study. Further research, using a combination of questionnaires and interviews is needed.

In spite of the limitations mentioned above, this study has achieved its objectives of understanding principals' knowledge about and attitudes regarding inclusive education. It has also provided recommendations for the Department of Education as well as for the researchers who are interested in the same field of study.

REFERENCES

Abhilak, V. (1994). **The Indian teacher's perception of black teacher's occupational world.** Unpublished D.Ed thesis. KwaDlangezwa: University of Zululand.

Ainscow, M. (1999). **Understanding the development of inclusive schools.** Guildford: Falmers Press.

Ainscow, M. & Hopkins, D. (1992). Aboard the "Moving school". **Educational Leadership,** 50(3), 79-81.

Arick, J.R. & Krug, D.A. (1993). Special education administrators in the United States: Perception as policy and personnel issues. **The Journal of Special Education,** 27 (3), 348-364.

Avissar, G. (2000). The school principal and inclusion : A cross cultural research investigation. http://www.isec00.org.uk/abstracts/papaers. a/Avissar1.htm

Avramidis, E. & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: A review of the literature – **European Journal of special needs education,** 17(2), 129-147.

Avramidis, E.; Bayliss, P. & Burden, R. (2000a). A survey into mainstream teachers attitudes towards the inclusion of children with special educational needs in the ordinary school in one local education authority. **Educational Psychology,** 20 (20), 191-211.

Avramidis, E.; Bayliss, P. & Burden, R. (2000b). Student teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school **Teacher and Teacher Education,** 16, 227-293.

Bailey, J. & Du Plessis, D. (1997). Understanding principals' attitudes towards inclusive schooling. **Journal of Educational Administration,** 35(5), 428-438.

Barnet, C. & Monda-Amaya, L.E. (1998). Principals' knowledge of and attitudes toward inclusion. **Remedial and special education** May/June, 19(3), pp. 181 – 193.

Behr, A.L. (1988). **Empirical research methods for the human sciences.** Durban: Butterworth.

Bless, C. & Kathuria, L. (1993). **Fundamentals of social statistics: An African perspective.** Cape Town: Juta & Co. Ltd.

Borg, W.R. & Gall, M.D. (1983). **Educational research.** Fourth Edition. New York: Longman.

Botherson, M.J.; Sheriff, G.; Milburn, P. & Schertz, M. (2001). Elementary school principals and their needs and issues for inclusive early childhood programmes, **Topics in early childhood education**, 21 (1), 31-46.

Bothma, M. Gravett, S. & Swart, E. (2000). The attitudes of primary school teachers towards inclusive education. **South African Journal of Education**, 20 (3), 200-204.

Byrnes, L.J. & Sigafoos, J. (2001). A "consumer" survey of educational provision for the deaf and hard of hearing students. **American annals of the deaf**, 146 (5), 409-417.

Carl, A.E. (2002). **Teacher empowerment through curriculum development**: Lansdowne : Juta & Co. Ltd.

Carrington, S. (1999). Inclusion needs a different school culture. **International Journal of Inclusive Education**, 3(3), 57-268.

Chiuho, S.O. (2005). Principals' attitudes towards inclusive education http://66.218.69.11/ssearch/cache?ei=UTF-8 & P=principals % 27 + Attitudes + T.

Cohen, L. Manion, L. & Morrison, K. (2000). **Research methodology in education.** (Fifth Edition). London: Routledge Falmer.

Cohen, L. & Manion, L. (1989). **Research methods in education.** London : Croom Helm.

Cook, B.G.; Tankersley, M.; Cook, L. & Landrum, T.J. (2000). Teachers' attitudes toward their included students with disabilities. http://web1.infotrac.galegroup.com.

Cuban, L. (1988). A Fundamental puzzle of school reform. **Phi Delta Kappan,** 70(5), pp 341-344.

Daane, C.J.; Beirne-Smith, M. & Dianne, L. (2000). Administrators and teacher perceptions at the collaborative efforts of inclusion on the elementary grades. **Journal of education,** 121(2), 1-9.

Davies, J. & Green, L. (1998). Mainstream teachers attitudes to the mainstreaming of learners with special educational needs in primary classroom: A Western Cape study. **South African Journal of Education,** 18 (2), 97-102.

Department of Education (1999). **Consultative paper No. 1 on special education: Building an inclusive education and training system.** Pretoria : Government Printers.

Department of Education (1997). **Quality education for all-overcoming the barriers to learning and development.** Report of the national commission on special needs in Education and Training (NCSNET) and the National committee on Education Support Services (NCESS). Pretoria.

Department of Education. (2001). **Education White Paper 6:** Special Needs Education-Building an inclusive education and training system. Pretoria: Department of Education

Donald, D.; Lazarus, S. & Lolwana, P. (1997). **Educational psychology in social context : Challenges of development, social issues, and special need in Southern Africa.** Cape Town: Oxford University Press.

Dyal, A.B.; Flynt, S.W. & Walker-Bennett, D. (1996). **Schools and inclusion. Principals; perceptions, cleaning house,** Sep/Oct, 70 (1) pp. 32-35.

Edmonds, R. (1982). Programs of school improvement: An overview. **Educational Leadership,** 40(3), 411-416.

Engelbrecht, P. & Snyman, H. (1999). Educating pre-service teachers in inclusive education. Reflections at the Stellenbosh experience in South Africa. **International Journal of Special Education** 14(1), 96-100.

Engelbrecht, P.; Forlin, C.; Eloff, L. & Swart, E. (2001). Developing a support programme for teachers involved with inclusion in South Africa. **International Journal of Special Education, 16(1),** 80-89.

Falvery, M.A. (Ed.) (1995). **Inclusive and heterogeneous schooling.** Assessment, curriculum and instruction. London: Paul H. Brookes.

Forlin, C. (1998). Teachers personal concerns about including children with a disability in regular classrooms. **Journal of Developmental and Physical disabilities,** 10(1), 87-106.

Fuchs, D. & Fuchs, L. (1993). Inclusive school movement and the radicalisation of special education reform. Paper for the office of special education programmes and the national institution of child health and human development. **Eric Document,** No. Ed. 364046.

Fullan, M. & Stiegelbauer, S. (1991). **The new meaning of educational change.** New York: Teachers challenge press. Columbia University.

Fullan, M. (1992). **Successful school improvement.** The implementation perspective and beyond. Buckingham: Open University Press.

Gartner, A. & Lipsky, D.K. (1987). Beyond special education. Toward a quality system for all students. **Harvard Educational Review,** 57(4), 367-395.

Goor, M.B.; Schwenn, J.O.; Boyer, L. (1979). Preparing principals for leadership in special education. **Intervention in school and clinic, 32** (3), 13-141.

Graves, P. & Tracy, J. (1998). Education for children with disabilities : The rationale for inclusion. **Journal at Pediatrics and Child Health, 34,** 220 – 225.

Greer, B.G. & Greer, J.G. (1995). Questions and answers about inclusion: What every teacher should know. **The Cleaning House, 68,** 339-342.

Hall, J.T. (1997). **Social devaluation and special education – The right to full mainstream inclusion and an honest statement.** London. Jessica Kingsley Publishers.

Hall, G.E. & Hord, S.M. (1987). **Change in schools: Facilitating the press.** New York: State University of New York Press.

Hallinger, P. & Heck, R. (1996). Reassessing the principal's role in school effectiveness. A review of empirical research, 1980 – 1995. **Educational Administration Quarterly,** 32 (1), 5 – 44.

Hay, J.F. (2003). Implementation of the inclusive education. Paradigm shift in South African education support services. **South Africa Journal of Education,** 23 (2), 135-138.

Hay, J.F.; Smit, J. & Paulsen, M. (2001). Teacher preparedness for inclusive education. **South African Journal of Education,** 21 (4) : 213 – 218.

Hegarty, S. (1994). Integration and the teacher. In C.J.N. Meijer, S.J. Pijl & S. Hegarty, (Eds.); **New perspectives in special education: A six-country study of integration** (pp. 125 -131). London : Routledge.

Henerson, M.E.; Morris, L.L. & Fitz-Gibbon, C.T. (1987). **How to measure attitudes.** London: Page Publication.

Hersey, P. & Blanchard, K.H. (1988). **Management of organizational behaviour-Utilising human resources.** Fifth Edition. London: Prentice Hall.

Hill, D. (1993). The realities of principalship. Castleton state College VT course report. **Eric Document Reproduction Service.** No. Ed. 364972.

Hoover, J. (1984). Effect of special education classroom experience of pre-service elementary teachers on attitudes towards mainstreaming as measured before and after student teaching. **Journal of research and development in education,** 18(1), 33-39.

Ingram, P.D. (1997). Leadership behaviours of principals in inclusive educational settings. **Journal of Educational Administration,** 35(5). http://www.emerald-Pettipher-Jack of all trades for Manager of All: Roles of the Inclusive Principal... page 13 of 14.

Kidder, L.H. & Judd, C.M. (1986). **Research methods in social relations.** New York : Houghton Miffin Company.

Langone, J. (1998). Managing inclusive instructional settings. **Technology Cooperative Planning and Team-based Organization Focus on Exceptional Children,** 30 (8), 1-16.

Lazarus, S.; Daniels, B. & Engelbrecht, L. (1999). The inclusive school. In P. Engelbrecht, L. Green, S.; Naicker & L. Engelbrecht (Eds.) **Inclusive Education in Action in South Africa** (pp. 45-68). Pretoria: Van Schaiks.

Leedy, P.D. & Ormrod, J.E. (2005). **Practical research Planning design.** New Jersey: Pearson: Merrill Prentice Hall.

Le Grange, L. & Reddy, C. (1998). **Continuous assessment: An introduction and guidelines to implementation.** Kenwyn : Juta & Co. Ltd.

Levine, D.V. & Lezotte, L.W. (1990). **Unusually effective schools: A review and analysis of research and practice.** Madison, WI : National Center for Effective schools research & development.

Lipsky, D.K. & Gartner, A. (1996). Inclusion, school restructuring and the remaking of American society. **Harvard Educational Review,** 66(4), 762-796.

Livingston, M. & Reed Good (2007). Attitudes of rural school principals toward inclusive practices and placements for students with severe disabilities.http://www.education.uiowa.ed/jrel/fall01/Livingston_010 2.htm.

Lomofsky, L. & Lazarus, S. (2001). South Africa first steps in the development of an inclusive education. **Cambridge Journal of Education,** 31 (3), 303 – 317.

Mahlangu, D.M.D. (1987). **Educational research methodology.** Pretoria : HAUM Printers.

Marshall, J.; Ralph, S. & Palmer, S. (2002). "I wasn't trained to work with them mainstream teachers attitudes to children with speech and language difficulty. **International Journal of Inclusive Education,** 6(3), 199-215).

Mashiya, N.J. (2003). **Educators attitudes towards inclusive education.** Unpublished M.Ed dissertation. KwaDlangezwa : University of Zululand.

Mayrowetz, D. & Weinestein, C.S. (1999). Sources of leadership for inclusive education. Creating schools for all children. **Educational Administrative Quarterly,** 35 (3), 423-449.

Muijs, D. (2004). **Doing quantitative research in education with SPSS.** London: Sage Publications.

Mushoriwa, T. (2001). A study of the attitudes of primary school teachers in Harare towards the inclusion of blind children in regular classes. **British Journal of Special Education,** 28 (3), 142-147.

Muthukrishna, N. (2000). Transforming the system: The development of sustainable inclusive education policy and practice in South Africa. http://www.isec.2000.org.uk/abstracts/keynotes/Muthukrishna.htm.

Muthukrishna, N. & Schoeman, M. (2000). From "Special Needs" to "Quality Education for All". A participatory, problem-centred approach to policy development in South Africa. **International Journal of Inclusive Education,** 4(4), 315-335.

Naiker, S. (1999). Inclusive education South Africa. In Engelbrecht, P. Green, L. Naicker, S. & Engelbrecht, L. (Eds.). **Inclusive education in action in South Africa.** Pretoria: J.L. Van Schaik Publishers.

Neuman, W.L. (1997). **Social research methods: Qualitative and quantitative approaches.** Third Edition. Longo: Allyn & Bacon.

Ngidi, D.P. (1995). **Attitudes of teachers towards a career in rural schools.** Unpublished M.Ed dissertation. Pretoria: University of South Africa.

Orlich, D.C. (1978). **Designing sensible surveys.** New York: Redrave Publishing company.

Patterson, J.; Marshall, C. & Bowling, D. (2000). Are principals prepared to manage special education dilemmas? **NASSP Bulletin,** 9-20.

Pelco, L.E.; McLaughling V.L.; Korinek, L. & Boerio, L. J. (1997). Preparing leaders for special education. **The LISSE project. Case in Point** 10 (2), 21-36. Pennyslvania Department of education (1999). State improvement grant. Professional development partnership to improve student outcomes. Harrisburg P.A.

Pettipher, R. (2000). Jack of all trade for manager of all: Role of the Inclusive Principal.http//www.Isec2000.org.uk/abstract/paper/p/ pettipher.1.htm.

Pottas, L. (2005). **Inclusive education in South Africa: The challenges posed to the teachers of a child with a hearing loss.** Unpublished D.Phil thesis. Pretoria : University of Pretoria.

Republic of South Africa (1996b). **Constitution of the Republic of South Africa.** (Act 108 of 1996). Pretoria: Government Printer.

Republic of South Africa (1996a). **South African schools Act 1996 (Act 84 of 1996).** Pretoria: Government Printer No. 17579.

Riehl, C.J. (2000). The principal's role in creating inclusive schools for diverse students: A review of normative empirical and critical literature on the practice of educational administration, **Review of educational research** 70, 1, 55-81.

Rowntree, D. (1981). **Assessing standards: How shall we know them?** London: Kogan Page.

Ryndak, D.L. & Alpher, S. (1996). **Curriculum content for students with moderate and severe disabilities in inclusive settings.** Boston: Allyn & Bacon.

Sadek, F.M. & Sadek, R.C. (2000). Attitudes towards inclusive education in Egypt and implications for teachers preparation and training. International special education Congress 2000. **Including the Excluded.** University of Manchester.

Salisbury, C. & McGregor, G. (2002). **The reflective principal: Inquiry as a tool for school improvement.** OSEP Grant # H023D970520. Chicago IL.

Sands, D.J.; Kozleski, E.B. & French, N.K. (2000). **Inclusive Education for the 21st Century.** Belmont: Wadworth.

Schruggs, T.E. & Mastropieri, M.A. (1996). Teachers perceptions of mainstreaming inclusion, 1958-1995: A research synthesis. **Exceptional children,** 63(1). Retrieved May 14, 2004 from http://web1-infortrac.galegroup.com.

Sebba, J. & Ainscow, M. (1996). International development in inclusive Schooling: Mapping the issues. **Cambridge Journal of education,** 26(1) pp. 5-17.

Sergiovanni, T.J. (1995). Principalship : A reflective practice perspective. (3rd Ed.) Boston: Allyn & Bacon.

Sergiovanni, T.J. & Starrat, R.J. (1998). **A redefinition.** Sixth Edition. Boston : McGraw-Hill.

Sibaya, P.T. (1993). **Educational research method.** B.Ed study guide No. 1 KwaDlangezwa: University of Zululand.

Sirotnik, K.A. & Kimball, K. (1994). The unspecial place of special education in programs that prepare school administrators. **Journal of School Leadership.** 4, 598-630.

Smith-Davis, J. (2002). World initiates for inclusion. **Teaching exceptional children,** 2002: 77.

Smith, D.D. (1998). **Introduction to special education: Teaching in an age of challenge.** Third Edition. Boston: Allyn & Bacon.

Stainback, W. & Stainback, S. (1996). Collaboration, support networking, and community building. In S. Stainback & W. Sainback (Eds.), **Inclusion: A Guide for Educators** (pp. 193 – 2020). Baltimore, Maryland : Paul H. Brooks.

Steenkamp, C.S. (1984). **Praktiese riglyne vir vraelyskonstruksie geleentheidspublikasie.** No. 16 ISBN 0796901511. Pretoria: RGN-HSRC.

Swart, E.; Engelbrecht, P.; Eloff, I. & Pettipher, R. (2002). Implementing inclusive education in South Africa: Teachers attitudes and experiences. **Acta Academia**, 34(1), 175 – 189.

Tabachnick, B.G. & Fidel, L.S. (1989). **Using multivariate statistics.** New York: Harper & Row.

Thomas, G.; Walker, D. & Webb, J. (1998). **The making of the Inclusive School.** London: Routledge.

United nations Education, Scientific and Cultural Organisation (UNESCO) (1994). **The Salamanca statement and framework for action on special needs education.** Paris : UNESCO.

Urbani, G. (1993). Aspects of questionnaire design: Questionnaire formulation, response alternatives and scales. In P.T. Sibaya (Ed.) **Educational research methods: B.Ed Study Guide No.** (pp. 82-105). KwaDlangezwa: University of Zululand.

Van den Aardweg, E.M. & Van den Aardweg, E.D. (1988). **Dictionary of Educational Psychology.** Arcadia : E and E Enterprises.

Vaughn, S.; Elbaum, B.E. & Schumm, J.S. (1996). The effect of inclusion on the social functioning of students with learning disability. **Journal of Learning disabilities,** 29(56), 598-608.

Villa, R.A. & Thousand, J.S. (1995). **Creating an inclusive school.** Alexandria: Association for supervision and curriculum development.

Villa, R.A.; Thousand, J.S.; Meyers, H. & Nevin, A. (1996). Teacher and administrator perceptions of heterogeneous education. **Exceptional children, 63(1),** pp. 29-45.

Wigle, S.E. & Wicox, D.J (1999). The special education competencies of general education administrators. **Reading Involvement,** 36, 4- 15.

ANNEXURE   A

QUESTIONNAIRE

QUESTIONNAIRE

1. This is a questionnaire on principals' knowledge and attitudes regarding inclusive education.

2. You are requested to respond to all the items in this questionnaire.

3. The instructions on how to respond to each item accompany this questionnaire.

4. Your information will be confidential, therefore, do not write your name or name of the school on this questionnaire.

Your co-operation will be highly appreciated.

Thank you

Mr GS Mthethwa

P O Box 434

HLUHLUWE

3960

Please turn to next page.

SECTION A

PERSONAL PARTICULARS

Please cross (x) in the appropriate box.

1   Gender

1	2
Male	Female

2.   Teaching experience: in years

1	2	3	4	5
0-4	5-9	10-14	15-19	20 +

3.   Phase of the school

1	2
Foundation/Intermediate	Senior/FET

SECTION B

KNOWLEDGE QUESTIONNAIRE

Teachers employed at a mainstream school are, according to legislation, expected to accommodate learners with special educational needs in their classes. How would they go about this? Please make a cross (x) in the appropriate box.

Item No	Statement	Rating	
1.	By adjusting their classroom to facilitate a stimulating learning environment.	Agree 2	Disagree 1
2.	By adjusting their teaching to facilitate a creative learning environment.	Agree 2	Disagree 1
3.	By acknowledging the different needs of all children irrespective of their age.	Agree 2	Disagree 1
4.	By acknowledging the different needs of all children irrespective of their language.	Agree 2	Disagree 1
5.	By acknowledging the different needs of all children irrespective of their disability.	Agree 2	Disagree 1
6.	By collaborating with professional service providers.	Agree 2	Disagree 1
7.	By involving parents in the decision making process concerning how to handle their children.	Agree 2	Disagree 1
8.	By recommending that the child be transferred to a special school.	Agree 1	Disagree 2

The following statements pertain to the child with a special educational need. Please indicate whether they are True or False. Please make a cross (x) in the appropriate box.

Item No	Statement	Rating	
9.	The intellectual abilities of a child with a special educational need **always** differ from those of a normal child.	True 1	False 2
10.	A child with a special educational need **always** experiences difficulty in adapting to his/her social environment.	True 1	False 2
11.	A child with special educational need **never** gives appropriate answers when questions are asked.	True 1	False 2
12.	The attentiveness of a child with a special educational need is **always** weaker than that of a normal child.	True 1	False 2
13.	A child with a special educational need **always** has a poor reading abilities.	True 1	False 2
14.	A child with a special educational need can **never** function independently within the classroom.	True 1	False 2
15.	A child with a special educational need **always** needs additional assistance from the teacher.	True 1	False 2
16.	The academic progress of a child with a special educational need is **always** weaker compared to a normal child of the same age.	True 1	False 2

SECTION C

ATTITUDE QUESTIONNAIRE

Please indicate whether you agree or disagree with the following statements:

Please make a cross (x) in the appropriate box.

Item No.	Statement	Rating	
1.	The inclusion of children with special educational needs into regular classes will lead to a lowering of present standards in the schools.	Agree 1	Disagree 2
2.	A child with special educational need can receive a better quality of education at a regular school than at a special school.	Agree 2	Disagree 1
3.	Most children with special educational needs would not cope academically in a regular school.	Agree 1	Disagree 2
4.	Separate education for children with special educational needs has been effective and should not be changed.	Agree 1	Disagree 2
5.	Children with special educational needs should be given every opportunity to function in a regular class, where possible.	Agree 2	Disagree 1
6.	The regular class can be the least restrictive environment for the child with special educational needs.	Agree 2	Disagree 1
7.	The inclusion of children with special educational needs into regular schools is not very practical.	Agree 1	Disagree 2
8.	Inclusion is likely to foster grater understanding and acceptance of differences between the learners.	Agree 2	Disagree 1
9.	Special schools for the children with special educational needs are the most appropriate places for them to be educated.	Agree 1	Disagree 2

Item No.	Statement	Rating	
10.	Children with special educational needs who are included in regular schools have a greater ability to function there than those who attend special schools.	Agree 2	Disagree 1
11.	Inclusion is likely to have a negative effect on the emotional development of a child with special educational needs.	Agree 1	Disagree 2
12.	Children with special educational needs are likely to be isolated by their peers in regular schools.	Agree 1	Disagree 2
13.	Included children with special educational needs in regular schools are likely to experience stigma attached to their disability than those who are educated with other peers in special schools.	Agree 1	Disagree 2
14.	Regular contact with a child with a special educational need is potentially harmful for children without special educational needs.	Agree 1	Disagree 2
15.	I feel frustrated because I don't know how to help a child with a special educational need.	Agree 1	Disagree 2
16.	I feel uninformed towards a child with a special educational need.	Agree 1	Disagree 2
17.	I feel uncomfortable in the presence of a child with a special educational need.	Agree 1	Disagree 2
18.	I tend to ignore a child with a special educational need.	Agree 1	Disagree 2
19.	Interaction with normal children is likely to enable the child with a special educational need to develop a better self-image.	Agree 2	Disagree 1
20.	Children in regular classes are likely to develop a greater degree of acceptance of others with special needs through contact with them.	Agree 2	Disagree 1
21.	The challenge of being in a regular classroom is likely to promote the academic growth of the child with a special educational need.	Agree 2	Disagree 1

Item No.	Statement	Rating	
22.	The adjustments made by teachers to accommodate children with special educational needs are likely to benefit most normal learners in class.	Agree 2	Disagree 1
23.	Children with special educational needs require additional individual attention that would be to the demerit of the other learners.	Agree 1	Disagree 2
24.	It would be more difficult to maintain order in a regular class that includes a child with a special educational need.	Agree 1	Disagree 2
25.	The behaviour of children with special educational needs is likely to set a bad example for the rest of the class.	Agree 1	Disagree 2
26.	A child with special educational need's classroom behaviour requires more patience than a normal child.	Agree 1	Disagree 2
27.	Regular school teachers should not be expected to teach children with special educational needs.	Agree 1	Disagree 2
28.	Having a child with a special educational need in my school would require too much effort.	Agree 1	Disagree 2
29.	Regular teachers have the basic techniques to teach any children, including children with special educational needs	Agree 2	Disagree 1
30.	I am willing to allow a professional person in my school in order to support the inclusion of a child with special educational need.	Agree 2	Disagree 1

THE END – THANK YOU FOR YOUR PATIENCE.

ANNEXURE   B

LETTER OF REQUEST TO CONDUCT RESEARCH

P O Box 434
HLUHLUWE
3960
10 May 2007

The District Director
Obonjeni District
Private Bag X567
MKUZE
3965

Dear Sir

A REQUEST FOR PERMISSION TO CONDUCT RESEARHC WITH PRINCIPALS AS SUBJECTS

I am conducting research for M.Ed Degree in the Faculty of Education at the University of Zululand. I am writing this letter to request for permission for conducting the research with principals' in randomly selected schools under Obonjeni District. The topic for my research is entitled: *"The Principals' knowledge and attitudes regarding inclusive education: Implications for curriculum and assessment"*.

The aims of the study are:

1. To ascertain the extent to which principals know about inclusive education and a child with special educational needs.

2. To determine whether principals' biographical factors (gender, teaching experience and phase of the school) have any influence on their knowledge about inclusive education and a child with special educational needs.

3. To ascertain the nature of principals' attitudes towards inclusive education

4. To determine whether principals' biographical factors (gender, teaching experience and phase of the school) have any influence on their attitudes towards inclusive education.

5. To determine whether there is any relationship between principals' knowledge and attitudes regarding inclusive education.

Your consideration and permission will be highly appreciated.

Yours faithfully

GS MTHETHWA
(Student)

PROF DP NGIDI
(Supervisor)