THE IMPACT OF INCLUSIVE EDUCATION ON THE QUALITY OF TEACHING AND LEARNING IN THE FOUNDATION PHASE: AN EDUCATOR’S PERSPECTIVE

By
Thamindri Penceliah

Dissertation submitted in fulfilment of the requirement for the Masters Degree in Technology (Quality) Department of Operations and Quality Management, Durban University of Technology

APPROVED FOR FINAL EXAMINATION

SUPERVISOR: PROFESSOR K. REDDY
(B.COM, LLB, LLM, LLD.)

CO-SUPERVISOR: PROFESSOR N. DORASAMY
(PhD, MPM, B.PAED ARTS, B.A (HONS), B.ED, Advanced Diploma in Public Management)
DECLARATION
I, Thamindri Penceliah declare that:

I. The research reported in this dissertation, except where otherwise indicated, is my original research;

II. This dissertation has not been submitted for any degree or examination at any other university;

III. This dissertation does not contain other persons’ data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons;

IV. This dissertation does not contain other persons’ writing, unless specifically acknowledged as being sourced from other researchers. Where other written sources have been quoted, then:

a) Their words have been re-written, but the general information attributed to them has been referenced, and
b) Where their exact words have been used, their writing has been placed in quotation marks, and referenced; and that

V. This dissertation does not contain text, graphics or tables copied and pasted from the Internet, unless specifically acknowledged, and the source being detailed in the text and in the reference section.

______________________________
THAMINDRI PENCELIAH

______________________________
DATE
ACKNOWLEDGEMENTS

I wish to express my sincere and heartfelt thanks to the following people and/or parties for their invaluable advice, assistance, encouragement and support without which this study would not have been made possible:

- First and foremost, the Almighty God for his strength, guidance and inspiration in enabling me to complete this thesis;
- Professor K. Reddy, for his patience, constant guidance and interest in this study;
- Professor N. Dorasamy, for her valuable input throughout my chapters;
- My husband, Darry Penceliah, son, Yudhistra, and daughter, Nevida, for their unconditional love and support;
- Deepak Singh, statistician (DUT), for his sincere assistance with the data analysis;
- To all the educators and their principals for kindly assisting in the completion of the questionnaire; and
- Finally, to my late parents and sister, for their silent inspiration.
ABSTRACT

The study has been influenced by the experience of the researcher in inclusive education. In inclusive education, the educator is required to respond to the diverse individual needs of the learners. Since 1994, the education system has been continually changing, resulting in challenges. A number of policy documents have been published which provide scope for transformation and restructuring in education. The policy on inclusive education has resulted in major challenges in the classroom. This inclusive education policy document states that learners who experience barriers to learning should be accommodated in the mainstream school.

The aim of this study was to evaluate the challenges of inclusive education in a mainstream school on the quality of teaching and learning. Primary data was collected for this study using a survey method. A questionnaire consisting of thirty items was used to gather the needed information from all foundation phase educators from fourteen selected schools in the eThekwini region of KwaZulu-Natal province. Data were analysed using descriptive and inferential statistical techniques. Conclusions and recommendations were thereafter drawn from the literature and the findings of the study.

The study shows that the general knowledge of the respondents about inclusive education and barriers to learning are somewhat narrow. Most of the respondents have a negative attitude towards inclusive education, which can be attributed to lack of skills and the fact that inclusive education is still in its infancy stage in South Africa. It can be inferred that many of the schools are under-resourced and the implementation of inclusive education would be difficult under these conditions. The success of inclusive education is dependent on quality teacher education and training.

A substantial effort is required to successfully implement the paradigm shift towards inclusive education and change the attitude of educators.
TABLE OF CONTENTS

TITLE PAGE ................................................................................................................................. i
DECLARATION.............................................................................................................................. ii
ACKNOWLEDGEMENTS ........................................................................................................... iii
ABSTRACT ................................................................................................................................... iv
TABLE OF CONTENTS ............................................................................................................... v
LIST OF FIGURES ................................................................................................................... ix
LIST OF TABLES ...................................................................................................................... x
LIST OF REFERENCES ........................................................................................................... xi
LIST OF APPENDICES ............................................................................................................. xi

CHAPTER ONE: INTRODUCTION

1.1 Background to the study ...................................................................................................... 1
1.2 PROBLEM STATEMENT ..................................................................................................... 2
1.3 AIM AND OBJECTIVES OF STUDY ............................................................................. 4
1.4 RATIONAL FOR THE STUDY ....................................................................................... 4
1.5 SCOPE OF STUDY .......................................................................................................... 5
1.6 LITERATURE STUDY ...................................................................................................... 6
1.7 RESEARCH METHODOLOGY ....................................................................................... 6
1.7.1 Empirical research ..................................................................................................... 6
1.7.2 Study population ........................................................................................................ 6
1.7.3 Validity and reliability ............................................................................................... 6
1.8 CHAPTER OUTLINE OF STUDY .................................................................................... 7
1.9 CONCLUSION .................................................................................................................. 8
3.8 Pilot testing ............................................................................................................. 43
3.9 Data Collection ....................................................................................................... 43
3.10 Data analysis ......................................................................................................... 44
3.11.1 Data preparation ............................................................................................... 44
3.11.2 Data analysis and interpretation of the results ................................................. 44
3.11.2.1 Descriptive statistics .................................................................................... 45
3.11.2.2 Inferential statistics ....................................................................................... 45
3.12 Validity and reliability .......................................................................................... 46
3.12.1 Validity .............................................................................................................. 47
3.12.2 Reliability .......................................................................................................... 47
3.13 Conclusion ............................................................................................................. 48

CHAPTER FOUR: DATA ANALYSIS AND DISCUSSION OF RESULTS

4.1 Introduction ............................................................................................................ 50
4.2 Response rate ........................................................................................................ 50
4.3 Analysis of the reliability of the questionnaire through Cronbach’s alpha ......... 50
4.4 Factor analysis ....................................................................................................... 51
4.4.1 Importance of factor analysis ............................................................................ 52
4.5 Demographic details of respondents .................................................................. 56
4.5.1 Gender and age .................................................................................................. 56
4.5.2 Experience ......................................................................................................... 57
4.5.3 Qualifications .................................................................................................... 58
4.6 Section analysis ..................................................................................................... 60
4.6.1 Category: Knowledge ....................................................................................... 60
4.6.2 Category: Attitude ............................................................................................ 62
4.6.3 Category: Resources ......................................................................................... 64
4.6.4 Category: Experience ....................................................................................... 66
4.6.5 Category: Quality ................................................................. 67
4.7 Respondents' suggestions and observations ........................................... 70
4.8 Hypothesis testing ........................................................................ 73
4.8.1 Chi-Square test ........................................................................ 76
4.9 Cross tabulation ............................................................................. 78
4.10 Correlations .................................................................................. 79
4.11 Conclusion ..................................................................................... 80

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

5.1 Introduction .................................................................................. 82
5.2 Summary of the theoretical study ......................................................... 82
5.3 Summary of the empirical study .......................................................... 84
5.3.1 Biographic characteristics of respondents ........................................ 84
5.3.2 Category: Knowledge .................................................................. 85
5.3.3 Category: Attitude ....................................................................... 85
5.3.4 Category: resources ..................................................................... 86
5.3.5 Category: experience .................................................................... 86
5.3.6 Category: quality ......................................................................... 86
5.3.7 Respondents’ suggestions and observations ...................................... 87
5.4 Attainment of study objectives ............................................................ 88
5.5 Limitations ....................................................................................... 89
5.6 Recommendations ........................................................................... 90
5.7 Scope for future study ..................................................................... 91
5.8 Conclusion ....................................................................................... 91
LIST OF FIGURES

Figure 4.1 Experience of respondents ................................................................. 58
Figure 4.2 Qualifications of respondents .............................................................. 59
Figure 4.3 Level of grade being taught by respondents ....................................... 60
Figure: 4.4 Category: Knowledge ......................................................................... 62
Figure: 4.5 Category: Attitude ............................................................................. 63
Figure: 4.6 Category: Resources .......................................................................... 65
Figure 4.7 Category: Experience .......................................................................... 66
Figure 4.8 Category: Quality ................................................................................ 69
LIST OF TABLES

Table 2.1 Differences between mainstreaming and inclusion ........................................ 12
Table 2.2 Summaries of changes in education of learners who ........................................ 16
Table 2.3 Government policies that influence inclusive education .............................. 22
Table 4.1 Reliability scores .......................................................................................... 51
Table 4.2: Factor loading for knowledge ..................................................................... 53
Table 4.3: Factor loading for attitude .......................................................................... 53
Table 4.4: Factor loading for resources ........................................................................ 54
Table 4.5: Factor loading for experience ..................................................................... 54
Table 4.6: Factor loading for quality ............................................................................ 55
Table 4.7 Gender and age of respondents .................................................................... 57
Table 4.8 Educators’ concern ....................................................................................... 70
Table 4.9: Chi-Square Test .......................................................................................... 74
Table 4.10 Cross tabulation ......................................................................................... 78
Table: 4.11: Correlations ............................................................................................. 79
REFERENCE LIST ........................................................................................................... 94

LIST OF APPENDICES

APPENDIX 1 ......................................................................................................................... 101
APPENDIX 2 ......................................................................................................................... 102
APPENDIX 3 ......................................................................................................................... 106
CHAPTER ONE: INTRODUCTION

1.1 Background to the study
Since 1994, education systems have been continually changing and resulting in immense challenges. A number of policy documents have been published which provided scope for transformation and restructuring in education. The policy on Inclusive Education has resulted in major challenges in the classroom. This inclusive education policy document states that learners who experience barriers to learning should be taught in the inclusive education settings (Republic of South Africa: 2001a). The inclusion of the learner with 'special education needs or learning barriers' into the mainstream study is part of a universal human rights movement (Inclusive Education; 2006; 4). This means that all learners should have open and equal access to education and should be enrolled in an inclusive school.

The educational and social changes faced by schools today, have resulted in making schools acutely aware of the need to operate as effectively and productively as possible. The emphasis should be in providing learners with quality education. Schools must continually look to improve the effective use of resources and opportunities to attain excellence in education. The education and training system should promote education for all and foster the development of inclusive and supportive centres of learning that would enable the learners to participate actively in the education process so that they could develop and extend their potential and participate as equal members of society – humane and caring (Republic of South Africa, 2001).

Inclusive Education presents many exciting opportunities as well as challenges for education in South Africa. The urgent need to upgrade the entire general education system provides opportunities for major transformation of the mainstream to become inclusive (Lomofsky and Lazarus, 2001:306). This study sets out to establish an educator perspective of Inclusive Education within a mainstream school.
1.2 PROBLEM STATEMENT

Schools introduced inclusive education into the mainstream to adhere to the education policies of the Department of Education. Inclusive education is defined in the Education White Paper 6 (South Africa 2001) as a system that recognises that all children and youth can learn, and that they require the support to do so. Inclusive education has been the new reality in South Africa. Education is recognised as a fundamental right that must be available to all learners (South Africa, 1996 - Constitution, Act 108 of 1996, Section 29:1). At present, adequate consideration was not given to the overall quality of teaching and learning that currently existed within the mainstream school.

The Revised National Curriculum (RNCS) in South Africa expects educators to accommodate learner diversity. This places major responsibility on the shoulders of mainstream educators (Green, 2009:128). Hall, Campher and Smit, (2008:162) recognize that educators have to deal with complex dilemmas both in and out of the classroom in the process of delivering a curriculum relevant to the diverse needs of learners. Educators have to cope with multiple and diverse learning needs (Lomofsky, 2009). Few educators are trained to provide additional support to learners with learning barriers. The National Commission on Special Needs in Education and Training (NCSNET) and the National Commission for Education Support Services (NCESS) Report (South Africa 1998) describe “learners with barriers” as those who need additional planning and changes in order to help them to learn. Learners find themselves in the mainstream classrooms where they are expected to excel without any additional support (Chavuta, 2008). However, making a success of inclusive education requires more than a change of curriculum (Lomofsky, 2009:88). The challenge is to minimize, remove and prevent barriers to learning and development.

It is well documented that educational institutions have adopted the total quality management (TQM) concept within their institutions. TQM has become a catalyst for change in education. Quality education is only achieved when all learners are given equal opportunity to succeed. Toremen, Karakus and Yasan
(2009:33) contend that TQM principles have applications in educational institutions and resulted in desired outcomes. It could therefore be deduced that inclusive education and quality are inseparable concepts. The quality factor in primary schools will invariably affect the secondary schools and tertiary sector. This means that the TQM implementation in the primary schools may have important impact in the whole educational system.

Pottas (2005:52) advocates that educators are the key role-players in determining the quality of the implementation of the policy. Educators are expected to embrace the new philosophy, to think and to work in a new frame of reference. Ntombela (2011:5) postulates educators’ knowledge and understanding of inclusive education is greatly influenced by the quality and quantity of professional development. Therefore quality is the basic issue at the foundation phase if we want to attain a high quality education system.

Successful education depends on empowering, motivating and training educators. Quality management seeks to monitor and support these processes. According to Prinsloo (2001:345) it will be a formidable task to provide quality education in developing countries because of unemployment, poverty and unstable economy. This indicates further challenge for implementing inclusive education.

A comprehensive study of this nature has not taken place. Therefore, this study will envisage assessing a teacher perspective of inclusive education within a mainstream school. There is a need for a better understanding of the challenges of inclusive education within a mainstream school on the quality of teaching and learning.
1.3  AIM AND OBJECTIVES OF STUDY
The aim of this study is to evaluate the challenges of inclusive education in a mainstream school on the quality of teaching and learning.

The objectives of this study are:

- To determine the foundation phase educator perspective of inclusive education in the mainstream school,
- To determine the educator's perspectives of inclusive education on the quality of teaching and learning in the foundation phase, and
- To identify relationships, if any, between perspectives of inclusive education and biographic characteristics of foundation phase educators.

The critical questions are the following:

- What are Foundation Phase educator perspectives on inclusive education?
- What are educator perspectives on the impact of inclusive education on the quality of teaching and learning in the Foundation phase?
- How can educator biographies be used to understand perspectives of inclusive education on quality?

1.4  RATIONALE FOR THE STUDY
This study surveyed educators, reviewing the success of their teaching methods for learners with barriers. New teaching methods and a greater awareness of learning differences and disabilities that did reach a larger number of learners were established.

The results of this study can be used as a benchmark to implement new and effective teaching methods that will assist learners to solve problems in different ways. Such new methods may assist educators to reach out to a larger number
of learners. Whilst research has been conducted on general aspects of school, it appears that no significant study addressed challenges that inclusive education faces with respect to the quality of teaching and learning mainstream classroom.

As there is a dearth of information on the application of inclusive education, this study attempts to provide a practical discussion on the challenges that inclusive education. The study therefore envisages to evoke awareness among educators about the quality of teaching and learning in an inclusive education environment.

Learning disabilities of all types can be rendered more or less disabling, depending on their context. In a non–technological society, a child’s mathematics problem will not limit his/her success, just as in an illiterate society, a child’s inability to read or write will not restrict his/her development. Therefore, the quality issue at this basic level should be a matter of priority if a high quality of educational system is to be attained.

The results of the study can be utilised to develop appropriate strategies that will enhance the quality of teaching and learning. In addition, the findings will be of interest and assistance to schools in assessing their quality of teaching and learning.

1.5 SCOPE OF STUDY
The study was confined to foundation level educators at fourteen selected schools in the eThekwini region of KwaZulu-Natal. The findings from the study cannot be generalised to all schools in the region and other regions of KwaZulu-Natal. The results are only valid for the period in which research is conducted due fluctuations in the environment.
1.6 LITERATURE STUDY
A literature study was undertaken with a view to assembling and integrating material relating to an overview of inclusive education and policies governing inclusive education. The subsequent sections described practices and challenges of inclusive education. Further, total quality management in education and strategies for improving quality in inclusive education were examined.

1.7 RESEARCH METHODOLOGY
1.7.1 Empirical research
This study was a quantitative and descriptive study and evaluated educator's perceptions of inclusive education. Primary data was collected for this study using a survey method. A questionnaire consisting of thirty items were used to gather the needed information for this cross sectional study.

1.7.2 Study population
Kotler (226:69) contends that non-probability samples include elements from the population selected in a non-statistical manner. The type of sampling for the target population of this study was purposive and included all foundation phase educators at fourteen selected schools in the eThekwini region, KwaZulu-Natal. Leedy and Ormrod (2005:206) indicate that non-probability sample is quite subjective and the surveys can produce acceptable results more quickly and at a low cost than a probability sampling. After confirmation of the number of foundation phase educators in each school, questionnaires were personally distributed to the principals of each school. This procedure resulted in an achieved sample of 104 and a response rate of 88 percent.

1.7.3 Validity and reliability
Leedy and Ormrod (2005:28) define validity as the degree to which the research findings accurately represent what it is actually intended to measure. In this study, face, content, criterion and construct validation methods were utilized. The researcher took the following actions to ensure validity:
• The questionnaire was subjected to scrutiny by academics and professionals in the field and their opinion was taken into account; and
• The questionnaire was subjected to a pre-test group who had characteristics similar to those of the target group.

Welman, Mitchell and Kruger (2005:145) explain reliability as the consistency of performance of a measuring instrument. This means that the measuring instrument must deliver similar results consistently. The following measures were employed to ensure the reliability of the study:

• A pre-test study of the questionnaire was to make certain that all questions and statements were both relevant and easily understood;
• The questionnaires of the study ensured the anonymity of the respondents;
• The questionnaires used a closed question format; and
• Cronbach alpha was calculated to measure the reliability of the measurement.

1.8 CHAPTER OUTLINE OF STUDY

Chapter one: Introduction and background

This chapter explains the background to the study with reference to inclusive education and the mainstream school. The problem statement, aim, objectives and the research method used are introduced. The outline of the study, with details of each chapter, is then described.

Chapter two: Theoretical framework for inclusive education

This chapter provides the theoretical framework for inclusive education within a mainstream school. Policies governing inclusive education in South Africa, and total quality management in education are examined. Strategies for improving quality in inclusive education are discussed.
Chapter three: Research methodology

This chapter explains the plan for collection and analysis of data. The sampling method, questionnaire design, data collection method and data analysis techniques are discussed.

Chapter four: Data analysis

The findings of the empirical investigation are presented and discussed. Detailed analyses of the findings accompanied by numerical tabulations are also presented in this chapter.

Chapter five: Conclusions and recommendations

This chapter includes the summary of the theoretical study and empirical study. It is followed by attainment of study objectives and recommendations.

1.9 CONCLUSION

This chapter described the nature of information and the type of research activities to be carried out in the study. The next chapter reviews the theoretical framework for inclusive education in the mainstream school.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction
In inclusive education, the educator is required to respond to diverse individual needs of learners. Since 1994, a number of policy documents have been published in South Africa, which provides scope for transformation and restructuring in education. Inclusive education presents many challenges for education in South Africa. The study investigates the attitude of foundation level educators towards the inclusion of learners with barriers in the mainstream education.

This chapter commences with an overview of inclusive education and policies governing inclusive education. The subsequent sections describe the practice and challenges of inclusive education. The following section examines total quality management in education and strategies for improving quality in inclusive education.

2.2 Overview of inclusive education
Inclusive education is a worldwide trend in education and is well documented. The human rights relevant to education seem to be the important consideration for inclusive education (Dyson and Forlin 1999:29). The policy guiding inclusive education was first adopted at the World Conference held in Salamanca, Spain, in June 1994. This policy was regarded as the Salamanca Statement and recommended the following to governments (UNESCO 1994):

- Give the highest policy and budgetary priority to improve education services so that all children could be included, regardless of difficulties;
- Adopt, as a matter of law or policy, the principle of inclusive education and to enrol all children in ordinary schools unless there are compelling reasons for doing otherwise;
- Ensure that organisations of disabled people along with parents and community bodies are involved in planning and decision-making; and
• Put greater effort into pre-school strategies, as well as vocational aspects of inclusive education.

The Salamanca Statement, paragraph two, as cited in (Gyimah and Vanderpuye 2006:2), spells out five major clauses as key issues in inclusive education as follows:

• Every child has a fundamental right to education, and must be given the opportunity to achieve and maintain an acceptable level of learning;
• Every child has unique characteristics, interests, abilities and learning needs;
• Education systems should be designed and educational programmes implemented to take into account the wide diversity of these characteristics and needs;
• Those with special educational needs must have access to regular schools which should accommodate them within a child-centred pedagogy capable of meeting these needs; and
• 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 children and improve the efficiency and ultimately the cost-effectiveness of the entire education system.

It is clear from the above that learners with barriers to learning must be part of the mainstream school and given equal opportunities and access. This means that, in inclusive education, learners with barriers to learning must now be included in the mainstream school. It can be inferred that substantial effort is required from the various education departments to implement the paradigm shift towards inclusive education. South Africa has embraced inclusive education to address the challenges faced by learners that experience barriers to learning. Howell (2007:98) purports that “barriers to learning” is the preferred
South African term to identify learners that do not experience learning success. The author further suggests that the term “inclusive education” is preferable to “special needs”, which signifies a medical or deficit approach to educational challenges that locates the problem within the learner, rather than in the educational system. This will require that the mainstream school should include the support necessary to accommodate learners with special needs accordingly. Therefore, the level of educator training will play an important role in implementing inclusive education.

2.2.1. Meaning of inclusive education

Many definitions of inclusive education have evolved throughout the world, ranging from extending the scope of ordinary schools and including a greater diversity of learners. Inclusive education is defined in the Education White Paper 6 (South Africa, 2001) as a system that recognises that all children and youth can learn, and that they require the support to do so. In addition, inclusive education challenges the attitudes and behaviours of stakeholders; teaching methodologies and environment; and the curricula to meet the needs of all learners. Ainscow (2002:29) proposes that inclusive education should include the following:

- Inclusive education is a process;
- Inclusive education is concerned with the identification and removal of barriers;
- Inclusive education is about the presence, participation and achievement of all learners; and
- Inclusive education involves a particular emphasis on those groups of learners who may be at risk of marginalisation, exclusion or underachievement.

The perspective of the reference committees and consultative bodies who were commissioned to investigate the future of Special Education within the mainstream classroom define inclusive education as a learning environment that
promotes the full personal, academic and professional development of all learners irrespective of race, class, gender, disability, religion, culture, sexual preference, learning styles and language (South Africa 1998).

**Table 2.1** Differences between mainstreaming and inclusion

<table>
<thead>
<tr>
<th>Mainstreaming</th>
<th>Inclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mainstreaming is about getting learners to “fit into” a particular kind of</td>
<td>Inclusion is about recognising and respecting the differences between all</td>
</tr>
<tr>
<td>system or integrating them into this existing system.</td>
<td>learners and building on the similarities.</td>
</tr>
<tr>
<td>Mainstreaming is about giving some learners extra support so that they can</td>
<td>Inclusion is about supporting all learners, educators and the system as</td>
</tr>
<tr>
<td>“fit into” or be integrated into the “normal” classroom routine. Learners</td>
<td>a whole so that the full range of learning needs can be met. The focus</td>
</tr>
<tr>
<td>are assessed by specialists who diagnose and prescribe technical interventions, such as the placement of learners in programmes.</td>
<td>is on teaching and learning actors, with the emphasis on the development of good teaching strategies that will be of benefit to all learners.</td>
</tr>
<tr>
<td>Mainstreaming and integration focus on changes that need to take place in</td>
<td>Inclusion focuses on overcoming barriers in the system that prevent it from meeting the full range of learning needs. The focus is on the adaptation of and support systems available in the classroom.</td>
</tr>
<tr>
<td>learners so that they can “fit in”. Here the focus is on the learner.</td>
<td></td>
</tr>
</tbody>
</table>

*Source: White Paper 6 (South Africa 2001a)*
It can be seen from the above that the focus of inclusive education shifts from what is wrong with the learner to contextual factors that interfere with learning.

2.2.2 Barriers to learning
The National Commission on Special Needs in Education and Training (NCSNET) and the National Commission for Education Support Services (NCESS) Report (South Africa 1998) describe learners with barriers as those who need additional planning and changes in order to help them to learn. Walton et al. (2009:3) state that barriers to learning acknowledge that educational difficulties may arise from many sources, and may be intrinsic or extrinsic to learners. They further report that intrinsic barriers include physical, sensory, and neurological and developmental impairments, chronic illness, psycho-social disturbances and differing intellectual ability. The extrinsic barriers include those factors that arise outside the learner, but impact on learning. Extrinsic barriers arise from family and the cultural, social and economic context. Extrinsic barriers include lack of parental involvement and family problems like divorce, death and violence at home. It is also known that the school may contribute toward barriers to learning when learners are not taught in their mother tongue. In addition, crime has made its inroads at school, making it unsafe and may constitute a barrier to learning. Feldman, Gordon and Snyman (2001:146) affirm that learners will experience barriers differently depending on the family, school facilitating access and participation and the resources in the communities and societies in which the learner lives. Barriers to learning result from a complex interplay of learners and their contexts, including the reality of impairments or disabilities, socio-economic restraints and the wider societal factors (Walton et al. 2009:3). It can be concluded that barriers to learning will result in learners not maximising their educational experience.

Barriers to learning and learning needs could be either permanent, recently acquired, fluctuating or circumstantial. The Education White Paper 6 on Special
Education Needs Education (South Africa, 2001b) lists the following barriers to learning:

- Physical, mental, sensory, neurological and developmental impairments;
- Psycho-social disturbances;
- Differences in intellectual ability;
- Particular life experiences;
- Socio-economic deprivation;
- Negative attitudes to and stereotyping of differences;
- An inflexible curriculum;
- Inappropriate languages or language and teaching;
- Inappropriate communication;
- Inaccessible and unsafe built environments;
- Inappropriate and inadequate support services;
- Inadequate policies and legislation;
- The non-recognition and non-involvement of parents; and
- Inadequately and inappropriately trained education managers and educators.

It has been reported that approximately 15 percent of the total number of learners who are experiencing barriers to learning are catered for in special schools and the rest are in mainstream classes (South Africa 2001b). The changes in the education of learners who experience barriers to learning and development are aptly summarised by Burden and Landersberg (2000:35-37) in Table 2.2. It is within this context that South Africa should move swiftly toward an inclusive paradigm in the South African education system, in order to cater for the needs of all learners.
2.2.3 Approaches to inclusive education

The Universal Declaration of Human Rights, in 1949, documented the right of every human to be educated. The South African education is undergoing a slow, yet definite change. Inclusive education has become nationally, both a constitutional imperative and an unequivocal reality (Pottas 2005:62).

The concept of inclusive education embraces the values of liberty, equality and human rights (Engelbrecht and Green 2001: 30). It recognizes and accommodates diversity, thereby respecting the rights of all members of the community. The move toward inclusive education shifts the focus from learners having to adjust to the demands of the system to the systems being capable of accommodating the diverse needs of all learners as inclusively as possible (Department of National Education 1997: 3). Sebba and Ainscow (1996:11) view inclusive education as a process by which a school attempts to respond to all pupils as individuals by reconsidering its organization and provision. Inclusive learners or learners with barriers should be supported to chip away at their barriers to combat and promote their maximum participation in the environment. Inclusive learners must be supported in reducing, breaking through and even removing their barriers (Johnson and Winograd 1985:23). The move towards inclusive education makes provision for compulsory education for all learners (South African 1996). Education for learners with barriers at ordinary schools should be provided with relevant educational support services.

According to Engelbrecht, Green, Naicker and Engelbrecht (1999:153), the schooling system in South Africa requires an urgent re–thinking and reworking. A modified system needs to recognize the cultural and linguistic diversity, the social factors influencing educability and attitudes towards a range of disabilities. With the transformation of the general unified system, there is a growing practice of ensuring the inclusion of learners with special educational needs into the mainstream of education (McGrath 1998). An inclusive
educational approach is a move from a deficit model of adjustment towards systemic change. Inclusive education is the difficulties or barriers encountered by the individual in interacting with his/her environment to a system which is required to adapt in order to accommodate the individual (Seedut, Duncan and Lazarus 2001). Lomofsky and Lazarus (2001:311) indicate that, due to interactive effects of intrinsic and extrinsic factors, special educational needs were being generated at more than double the rate to that of developed countries.

**TABLE 2.2 Summaries of changes in education of learners who experience barriers to learning and development**

<table>
<thead>
<tr>
<th></th>
<th>OLD POLICY</th>
<th>NEW POLICY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aim</strong></td>
<td>Personal development</td>
<td>Preparation for society</td>
</tr>
<tr>
<td><strong>Operation</strong></td>
<td>In isolation</td>
<td>Community</td>
</tr>
<tr>
<td><strong>Vision</strong></td>
<td>Based on race, exclusion</td>
<td>Non-discriminative/ equality, inclusive</td>
</tr>
<tr>
<td><strong>Principle</strong></td>
<td>Denial of racial exclusivity; blocking of access</td>
<td>Democracy, social justice, historical adjustment, discourse on rights</td>
</tr>
<tr>
<td><strong>Promotes</strong></td>
<td>Inequality, unequal access; discrimination; marginalisation/ labels</td>
<td>Equal, opportunities, equal access to education, equal rights; non-discrimination; accommodation of needs of diverse learners</td>
</tr>
<tr>
<td><strong>Provision of service</strong></td>
<td>Fragmented; services in rigid structures; education-support services (ESS) offered outside system; marginalised and segregated learners</td>
<td>Integrated, holistic – range of support services (the system of education as a whole must provide, and must enable all learners to have access to education). The system needs support in order to react to diversity. ESS* key aspect of service, provision of service from inside – not “added on”; learners fully included</td>
</tr>
<tr>
<td><strong>Concepts</strong></td>
<td>Constructs vision</td>
<td>Deconstruction and reallocation of terms based on vision; promotes new vision</td>
</tr>
<tr>
<td><strong>Questions asked</strong></td>
<td>What is the relationship between educational support services (ESS) and education</td>
<td>What is the relationship between ESS* and the needs of diverse learners? What is wrong with the system of education? How can we provide for</td>
</tr>
<tr>
<td>Educational needs</td>
<td>Segregated learners</td>
<td>Need for the system to change; needs and priorities that need to be addressed so that the system can react effectively to diversity in learner population</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Diversity</td>
<td>Based on race and category; promotes segregation</td>
<td>Diversity cuts across race, gender, categories, etc. acknowledges the diverse needs of learners and promotes integration</td>
</tr>
<tr>
<td>Learners</td>
<td>Segregated on the grounds of categories and labels</td>
<td>Rights to which learners are entitled based on principles and vision entrenched in the Constitution</td>
</tr>
<tr>
<td>Curriculum</td>
<td>Rigid</td>
<td>Flexible, accessible, inclusive</td>
</tr>
<tr>
<td>Education</td>
<td>Supports status quo</td>
<td>Transforming agent of change; promotes equal opportunities for race, disability, etc; provision of service holistic in nature</td>
</tr>
<tr>
<td>System</td>
<td>Unequal access</td>
<td>Promotes life-long learning</td>
</tr>
</tbody>
</table>

**Source: Burden and Landsberg (2000:35-37)**

In most countries, since 1980, there has been movement towards integration of special education into the mainstream. Inclusive education is based on a value system that recognizes and celebrates diversity arising from gender, nationally, race, language of origin, social background, and level of educational achievement or disability (Mittler 2000:10). The author further implies that inclusive education means that inclusive education is responsible for the education of all children and the curriculum must be adapted to cope with diversity. Jha (2002:15) supports the definition that removing barriers and bringing all children together irrespective of their physical, mental, social and economic status and securing their participation in learning activity leads to the
progress of inclusive education. Inclusive education presents many exciting opportunities as well as challenges for education in South Africa. The urgent need to upgrade the general education system in South Africa provides opportunities for transformation of mainstream education to become inclusive (Jha 2002: 315). The author states further that removing barriers and bringing all children together in a school irrespective of their physical and mental abilities and securing their participation in learning activity leads to initiation of inclusive education. The 1981 Report of the Warnock Committee (Inclusive Education 2006) reflects that a learner has special needs if he/she has learning difficulties. This calls for special educational provision to be made for such a learner. A child has learning difficulties if he/she has significantly greater difficulty in learning than the majority of learners of the same age.

According to Ainscow (1995:1), the aim of inclusive education is to restructure schools so that they respond to the learning needs of all children. The author states further that inclusive education firstly recognises that special learning needs can arise from social, psychological, economic, linguistic, cultural and physical (or disability) factors, resulting in the use of the term “children with special needs” rather than “children with disabilities”. In the second place, inclusive education recognises that any child can experience challenges in learning, during the school career in the short-term or long-term and, therefore, the school needs to continually review its teaching and learning to meet the needs of all the learners. It can be deduced that the implementation of inclusive education requires resources and commitment from the school with support from community and the government.

2.3 Historical overview of inclusive education

To understand the concept of inclusive education within the South African context, one needs to reflect on the history of Special Education. Prior to 1994, the South African Education Department was divided into 18 racially defined
education departments, with each department having their own policies regarding learners with special education needs. Not every education department made provision for special learners and disadvantaged communities were totally marginalized. This resulted in extreme disparities and discrepancies in the provision for specialized education for the various race groups and virtually no provision for black disabled children at a preschool level (South Africa 1998).

It is further reported that special schools for children who were deaf, hard of hearing, blind, partially sighted, epileptic, cerebral palsied and physically disabled were started in some education departments (Inclusive Education 2006). Commissions of inquiry investigated children with minimal brain dysfunction, autistic children and the severely mentally handicapped children, which resulted in the establishment of special schools for these children. The institutions of the severely mentally handicapped children were known as ‘training centres’. After the 1988 Education Affairs Act was passed, these training centres were then regarded as ‘schools’. The distinction and separation of these learners into various institutions placed a major financial burden on the state. The institutions were not only separated and categorized on the grounds of their learner’s disability, but also on race and culture.

Learners in need of special resources, adaptations to the curriculum or different assessment strategies to aid them with their learning were often referred to as ‘learners with special education needs’ (South Africa 1998). It has been further reported that the ‘labelling’, categorizing and stigmatizing of young children, had an adverse effect on their self-esteem and self-worth.

The Universal Declaration of Human Rights in 1949 emphasized the right of every human to be educated as cited by Johnson (1986: 1-2). Several instances in United States of America, from as early as 1893 to 1973, of discrimination against learners with disabilities and who were prevented from receiving an education have been documented. These learners were
institutionalized because they could not be accommodated in the education system (Johnson 1986:2).

Presently, South African policies allow all learners, regardless of their disabilities to be entitled to a free public education. In 1975, an Education for All Handicapped Children Act was passed to provide free education and relevant services to learners with disabilities. Furthermore, in Article 2 of the Convention on the Right of the Child, (UN 1989), it was also spelt out that no child should be discriminated against and every child has the right to receive an education (South Africa 2002).

The White Paper (South Africa 2001), concerned with meeting special education needs, suggests that special schools should work more closely with mainstream schools in order to increase inclusion and it states that to move successfully to greater inclusion, it is essential that pupils with complex special education needs in mainstream schools receive specialist support.

At the 1990 Jomtien World Conference, in Thailand, the goals for ‘Education for All’ were set and it was proclaimed that every person – child, youth and adult - shall be able to benefit from educational opportunities which would meet their basic learning needs. Ever since that conference, UNESCO, along with other UN agencies, and a number of international and national non-governmental organizations have been working towards these goals. The inclusion of pupils with learning barriers to learning and development in ordinary schools and classrooms is part of a global human rights movement. In 1994, at the UNESCO World Conference on Special Needs Education held in Salamanca, Spain, the idea of inclusive education was given further impetus. The conference considered the future international direction of special needs to ensure the rights of children to receive a basic education (UNESCO 1994).

The marginalization and exclusion of learners from an educational system was addressed at the Dakar World Education Forum in April 2000 and it was so aptly captured in the statement: “The key challenge is to ensure that a broad vision of
Education for All as an inclusive concept is reflected in national government and funding agency policies. ‘Education for All’... must take account of the need of the poor and the most disadvantaged... young people and adults affected by conflict, HIV/AIDS, hunger and poor health: and those with special learning needs....” (South Africa 2001b).

The turning point for all South Africans occurred in 1994 as a result of a democratic election and significant educational reforms have taken place, characterized by a spirit of democracy. The South African Constitution (Act 108 of 1996) founded our democratic state and common citizenship on the values of human dignity, the achievement of equality and the advancement of human rights and freedoms (Section1a). The Constitution, Sections 29 (1) and 9 (2,3,4 & 5), further provide a special challenge to all of us by requiring that we give all learners the fundamental right to basic education and addressing the imbalances of the past by focusing on the key issues of access, equity and redress.

At the beginning of 1997, the National Commission on Special Needs in Education and Training (NCSNET) and National Committee for Education Support Services (NCESS) was appointed to investigate and make recommendations on all aspects of special needs and support services in South Africa.

The vision proposed by NCSNET/NCESS is that of “an education and training system that promotes education for all and fosters the development of inclusive and supportive centres of learning that enable all learners to participate actively in education process so that they can develop and extend their potential and participate as equal members of society” (South Africa 1997:20, NCSNET/NCESS Report).

The Education White Paper 6 on Special Needs Education: Building an Inclusive Education and Training System outlines how the system should
transform itself to accommodate the full range of learning needs and establish a
caring and humane society (South Africa 2001a).

2.4 Policies governing inclusive education in South Africa

The most important government policies that resulted in inclusive education have been captured by Pottas (2005:25) in Table 2.3, see page 22.

The development of specialized education in South Africa was influenced by political and philosophical factors. This has resulted in gross inequalities and inconsistencies. Lomofsky and Lazarus (2001:17) contend that the current South African School Act of 1999 states that public schools must admit learners and serve their educational needs without discriminating in any way. They further found gaps and weaknesses in this Act as it restricts the rights of learners experiencing barriers. It undermines the development of an integrated inclusive educational system. National Curriculum on Special Needs in Education and Training (NCSNET) contributed to the understanding of the nature and extent of barriers to learning in South Africa. This policy provides for the needs of learners to be met and addressed if effective learning and development is to be provided and sustained.

The educational system, therefore, needed to be structured in such a way so as to accommodate for the diversity of learners’ needs. It was found that barriers to learning and development are described as those factors which lead to the inability of the system to accommodate diversity leads or prevents learners from accessing educational provision (South Africa1997:12). The vision is to provide

Table 2.3 Government policies that influence inclusive education

<table>
<thead>
<tr>
<th>Policy and premise</th>
<th>Key initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>The White Paper on Education and Training in a Democratic</td>
<td>• To restore respect for diversity and the culture of teaching and learning – The Culture of Teaching,</td>
</tr>
<tr>
<td>South Africa – 1995</td>
<td>Learning and Services (COLTS).</td>
</tr>
<tr>
<td>--------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>“Education and training are basic human rights. The State has an obligation to protect and advance these rights, so that all citizens irrespective of race, class, gender, creed or age, have the opportunity to develop their capacities and potential, and make their full contribution to society.” (DOE, 1995:21)</td>
<td>- To give recognition to prior knowledge and the concept of life-long learning – The National Qualifications Framework (NQF).</td>
</tr>
<tr>
<td></td>
<td>- To develop a curriculum that responds to the diverse learner needs, respects individually and is based on the belief that all learners can achieve success. It is ‘inclusive’ by nature and focuses on the processes whereby learners achieve the desired outcomes. – An Outcomes-Based Curriculum (OBE).</td>
</tr>
<tr>
<td></td>
<td>- To develop a holistic and integrated approach regarding education support services (ESS).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The South African Schools Act – 1996</th>
<th>To provide quality education for all learners.</th>
</tr>
</thead>
<tbody>
<tr>
<td>“… the governing body of a public school must promote the best interests of the school and strive to ensure its development through the provision of quality education for all learners at the school” (DOE, 1996:14, Section 20:1a).</td>
<td>- To allow for greater autonomy in school governance and funding at local level through the use of School Governing Bodies (SGBs).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The White Paper on an Integrated National Disability Strategy – 1997</th>
<th>To ensure that people with disability are able to access the same fundamental rights and responsibilities as any other citizen.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Conducted simultaneously with the NCSNET/NCESS. Recommendations incorporated into the Commission’s Report)</td>
<td>- To recognise the need to restructure society, including the physical environment, to enable everyone to participate fully in society.</td>
</tr>
<tr>
<td></td>
<td>- To provide life skills training for independent living.</td>
</tr>
<tr>
<td></td>
<td>- To provide assistive devices and specialised equipment.</td>
</tr>
</tbody>
</table>

Source: Pottas (2005:25)
quality education for all learners. The education and training system must respond and respect the diverse learning needs of every learner (South Africa 2001).

2.5 Building an inclusive education and training system

Inclusive education has been the new reality in South Africa. Education is recognised as a fundamental right that must be available to all learners (South Africa, 1996 - Constitution, Act 108 of 1996, Section 29:1). The Education White Paper 6 on Special Needs Education (South Africa 2001) reports the following about inclusive education:

- Acknowledging that all children and youth can learn and that all children and youth need support;
- Accepting and respecting that all learners are different in some way and have different learning needs which are equally valued and an ordinary part of our human experience;
- Enabling education structures, systems and learning methodologies to meet the needs of all learners;
- Acknowledging and respecting differences in learners whether due to age, gender, ethnicity, language, class, and disability or HIV status;
- Changing attitudes, behaviour, teaching methodologies, curricula and the environment to meet the needs of all learners;
- Maximising the participation of all learners in the culture and the curricula of educational institutions and uncovering and minimizing barriers to learning;
- Empowering learners by developing their individual strengths and enabling them to participate critically in the process of learning; and
- Acknowledging that learning also occurs in the home and community, and within formal and informal modes and structures.
Many of the above provisions follow the recommendations of the Salamanca Statement of 1994; a UNESCO document that asserts that inclusive education will address discrimination and achieve quality education for all. The inclusion of learners with ‘special education needs’ or ‘learning barriers’ into mainstream classes, is part of a universal human rights movement. It has therefore become imperative for all countries to create “equal opportunities for all learners to learn and succeed” (UNESCO 1994). Inclusive education addresses the educational needs of all learners in a non-threatening, supportive learning environment. This includes learners who were formally disadvantaged and excluded from education because of “barriers to learning” (Inclusive education 2009).

The Revised National Curriculum (RNCS) in South Africa expects educators to accommodate learner diversity. This places major responsibility on the shoulders of mainstream educators (Green and Forrester 2009:128). Hall, Campher and Smit, (2008:162) recognize that educators have to deal with complex dilemmas both in and out of the classroom in the process of delivering a curriculum relevant to the diverse needs of learners. Educators have to cope with multiple and diverse learning needs (Lomofsky 1998). Few educators are trained to provide additional support to learners with special needs. Learners find themselves in the mainstream classrooms where they are expected to excel without any additional support (Chavuta 2008). No one method, approach or philosophy can be used. Educators need to know and feel competent to use a variety of methods, each of which can sometimes lead to success. The revised national curriculum in South Africa offers the flexibility to make inclusive education a reality. However, making a success of inclusive education requires more than a change of curriculum (Lomofsky 2009:128). The challenge is to minimize, remove and prevent barriers to learning and development. The education system should be assisted to become more responsive to the diverse needs of learners. According to Stainback and Stainback (2006: 206), it is imperative that learning content must be recognized and account must be taken of the dynamic nature of what learners need in order to successfully work or live
in a community. The Report of National Commission on Special Needs in Education and Training (NCSNET) views learners with special needs as problematic in that all learners do not fit into the mainstream educational system (South Africa 1997). It further recognizes the diverse range of needs that exist. The educational system needs to be structured to accommodate diversity of the learner and system of needs.

2.6 Practice of inclusive education

Educators in South Africa accept the Seven Points of the Inclusion Charter (South Africa 1997:10-11). The Charter was first drawn up in 1989 by the Centre for the Studies on Inclusive Education (CSIE) in Britain and the Charter’s seven points include the following:

- Support an end to segregation in education on the basis of disability or learning difficulty;
- Support an end to segregation in education as a human rights and an equal opportunities perspective;
- All learners share equal value and status and, therefore, exclusion of learners with barriers of learning from the mainstream is discriminating;
- The gradual transfer of resources, expertise, educators and learners from segregated special schools to the inclusive mainstream;
- De-segregating special education will assist in changing discriminatory attitudes and developing a fair society;
- Endeavour to increase the participation of learners with barriers of learning in community life and reduce segregated education; and
- Central and local governments to facilitate the goal towards segregated education system (Centre for the Studies on Inclusive Education-CSIE, 2000).
The incorporation of the seven points of the Inclusion Charter has come with challenges in implementing inclusive education.

2.6.1 Operational challenges and problems of inclusive education

Prinsloo (2001:344) reports that there are many laudable policies in respect of inclusive education and identifies the following problems:

- Inclusive policies did not protect individual rights adequately;
- The voices of the marginalised are often not heard;
- The manner in which barriers to learning has been accommodated in the mainstream is unsatisfactory;
- The community’s contribution towards inclusive education is inadequate, especially in developing countries;
- The implications of inclusive education on educators’ roles have not been determined;
- The manner in which special schools can promote inclusivity has not been utilised;
- Classroom practice to respond to learner diversity needs support;
- Identifying institutional environment that will contribute towards inclusivity;
- Overcoming pressures to exclude inclusivity;
- Identifying barriers that impede development of inclusiveness;
- Addressing benefits to all learners in an inclusive classroom; and
- Evaluating the effectiveness of inclusive education.

It can be said that the problems listed above will undoubtedly create many challenges for the educator. Similarly, Beyers and Hay (2007:395) contend that further challenges for implementing inclusive education are as follows:

- The culture of teaching and learning is inadequate – the poor grade twelve results, absenteeism and poor attendance of learners and educators persist in disadvantaged schools;
• A lack of professional work ethics within the educator’s fraternity – where the role of the union and the government has become blurred;
• The ratio between educators and learners are not conducive to effective teaching and learning, especially in inclusive education;
• There is a large percentage of educators that are under qualified – a substantial number of educators do not have a grade twelve or a three year professional qualification;
• The morale of educators is at an all-time low – the low status could be attributed to the poor salaries and educators’ workload;
• There is a lack of discipline amongst learners – learners do not have respect for educators;
• It seems that many schools do not have the management skills to implement inclusive education effectively; and
• There is an inadequate education support service staff – support staff is crucial to facilitate the implementation of inclusive education;

It could be concluded that for the successful implementation of inclusive education, drastic measures are necessary to address the above concerns.

2.6.2 International initiatives for inclusive education

In 1994, representatives of 92 governments and 25 international organisations met in Salamanca, Spain, to promote inclusive education (UNESCO 1994:10). This meeting resulted in the so-called Salamanca statement which implied that the placement of learners in special schools or special classes should be an exception and not a rule.

Chavuta (2008: 13) explains that, in Malawi, learners with special needs are supported through resource classrooms within the mainstream schools. In Scandinavian countries, the emphasis for special needs has shifted from separate special schooling to one of integration (Meijer 1998). The United Kingdom and United States of America have followed this practice since 1970’s.
South Africa has implemented Outcomes Based Education to address some of the challenges of inclusive education in last ten years (Engelbrecht, Green, Naicker & Engelbrecht 1999). This new curriculum was introduced to facilitate the transformation of the educational system. In this system, all learners perform successfully, but not at the same pace. Each successful learning experience is a stepping stone to more successes. Schools are pivotal in creating conditions for success at schools. India practices “open schooling” system. In this system Kolkata, in India, practices a method in which learners coming from economically sound background learn together with those economically deprived. The point made is that breaking barriers need not be an isolated strategy but could be a systemic strategy to bring inclusion, equity and re-defined quality as a wider vision in education (Jha 2002:41). The international practice of inclusive education laid a useful foundation for assess the practice in South Africa. It can be deduced that many of the international practices of inclusive education have been incorporated into South African policy and guidelines.

2.7 Total Quality Management Systems

Evans (2008:23) defines quality management systems as sets of functions or activities within an organisation that work together to achieve organisational goals. Total quality management emphasises a commitment by management to have a continuing organisation-wide drive towards excellence in all aspects of products and services that are important to the customer (Heizer and Render 2008:198). It has been well documented that total quality management (TQM) is an important tool for any institution to improve and adjust with the changes.

Total quality management has been an important development and a source of competitive advantage and forms the foundation for performance excellence. The core principles of total quality management encourages business practices that result in satisfied customers, cost reduction, increased productivity, and
enhanced quality outputs (Lee 2002:142). Goetsch and Davis (2002:5) identify eight principles that support quality management as follows:

- Customer focus – understanding their needs and endeavouring to exceed their expectations;
- Leadership – imparting direction, unity of purpose, and a supporting work environment;
- Involvement of employees – ensuring that all employees are able to fully utilise their abilities for the organisation’s gain;
- Process approach – recognising that all work is done through processes, and should therefore be managed accordingly;
- System approach to management – expands on the process approach in that achieving any objective requires a system of interconnected processes;
- Continual improvement – recognising and taking action on the basis that no process is so good that further improvement is impossible;
- Factual approach to decision making – acknowledging that well-grounded decisions must be based on analysis of factual data and information; and;
- Mutually based supplier relationships – synergistic results can be achieved because such relationships can enhance the ability of both to add value.

From the aforementioned, it can be deduced that total quality management is a management philosophy that encourages an organisational culture and delivers customer satisfaction through continuous improvement. It is documented that total staff involvement in TQM is essential for quality improvement and motivation of staff. Total quality management is a key tool for organisations to improve and meet customer expectations. Toremen, Karakus and Yasan (2009:33) affirm that total quality management has broad applications in an educational environment.
2.7.1. Total quality management in education

It is well documented that educational institutions have adopted the TQM concept within their institutions. TQM has become a catalyst for change in education. Quality education is only achieved when all learners are given equal opportunity to succeed. Toremen, Karakus and Yasan (2009:33) contend that TQM principles have applications in educational institutions and resulted in desired outcomes. They further report that with these applications, school improvement has become a continual process and contributed to unity, change and trust. It could, therefore, be deduced that inclusive education and quality are inseparable concepts. Toremen, Karakus and Yasan (2009:31) identifies the following components of total quality management applicable to educational institutions:

- Leadership – The difficult part of TQM is to create a team spirit and to co-ordinate employees’ efforts to achieve a certain goal;
- Customer satisfaction – A customer is any person or group that receives products or services and the needs of the customer should be determined to achieve a high level of quality. There are internal and external customers in TQM. External customers are people and institutions outside the school system, for example, parents, community at large, businesses and government. Internal customers are within the school, such as educators, learners and support staff;
- Education – Education as a component of TQM implies that educational administrators will be responsible for educating staff;
- Continual improvement – The continual improvement principle of TQM means that every new day should not be the same as the previous day. The continual change and improvement is the subject of TQM;
- Involvement – The school should use the creative powers and abilities of all its stakeholders;
• Teamwork – The school to realise its objectives and be effective, it should focus on teamwork and co-operation of staff; and
• Data focused work – Gathering and analysing data is not sufficient to be an effective quality leader. Such a leader should listen, learn and understand to improve the system.

It can be concluded that TQM principles have been adapted for educational institutions. Ng (2008:123) identifies three important insights into educational quality assurance that is it develops in phases, changes the nature of education and is a paradoxical journey. The quality factor in primary schools will invariably affect the secondary schools and tertiary sector. This means that the TQM implementation in the primary schools may have important impact in the whole educational system.

The 1990 World Declaration on Education for All: Meeting Basic Learning Needs Article 3.1 states that, inter alia:

“Basic education should be provided to all children… To this end, basic education services of quality should be expanded and consistent measures must be taken to reduce disparities” (UNESCO 1998:3).

Ainscow (1991:3) postulates that research on inclusive education should focus on school improvement in terms of whole school responses and teaching strategies that include all learners. He further states that effective schools see learners experiencing challenges in learning as indicators for the need to reform and are characterised by the following (Ainscow 1991:3):

• Strong administrative leadership and attention to quality of teaching;
• Emphasize on learner acquisition of basic skills;
• High expectations for learner and confidence among educators that they address with learners’ individual needs;
• Include a broad range of curriculum experiences for all learners;
- Provide an orderly and safe climate that is conducive to teaching and learning;
- Support educators with further training and development to cope with challenges and keep abreast with recent developments; and
- Constant monitoring of learners' progress.

From the above, it can be deduced that to address the challenges of inclusive education is dependent also on quality teacher education and training. Ntombela (2011:6) qualifies that several international studies have found that educators' attitudes towards inclusive education have a direct relationship to their commitment to inclusive practices that influence the outcomes of their practice. It seems that the challenge for educators is to come to grips with the innovative methods of implementing education. Toremen, Karakus and Yasan (2009:39) affirm that educators' levels of education improve results in higher standards and with higher expectations. It is further reported that the driving force of these higher standards and expectations would compel managers to excel to improve quality. It can be said that TQM is a dynamic process that must adjust to the changes in the environment.

Pottas (2005:52) advocates that educators are the key role–players in determining the quality of the implementation of the policy. Educators are expected to embrace the new philosophy, to think and to work in a new frame of reference. Quality is the buzzword that has permeated throughout organizations (Yeo, 2008a:266). Quality can be viewed as being exceptional, consistent, fitness for purpose, value for money and transformative (Sahney, Banwet and Karunes 2004:164). The successive and continuous nature of the educational process in the primary schools deeply affects the upper level schools through their product. Ntombela (2011:5) postulates that educators' knowledge and understanding of inclusive education are greatly influenced by the quality and quantity of professional development. Therefore, quality is the
basic issue at the foundation phase if we want to attain a high quality education system.

2.7.2 Integrated quality management systems

The Department of Education has implemented the Integrated Quality Management System (IQMS) whose main objective is to ensure quality of public education and to constantly improve the quality of teaching and learning. South African Qualification Framework (SAQA) defines IQMS as:

The combination of processes used to ensure that the degree of excellence specified is achieved. A quality management system is the sum of the activities and information an organisation uses to enable it to better and more consistently deliver products and services that meet and exceed the needs and expectations of its customers and beneficiaries, more cost effectively and cost efficiently, today and in the future (South Africa 2001:6).

Successful education depends on empowering, motivating and training educators. Quality management seeks to monitor and support these processes. It is well documented that the quest for quality is international in scope. Many nations adopted the Total Quality Management (TQM) principles as a way of achieving educational reform. TQM has enhanced student achievement, student’s self-concept and improved teacher morale. According to Prinsloo (2001:345), it will be a formidable task to provide quality education in developing countries because of unemployment, poverty and unstable economy. This indicates further challenges for implementing inclusive education.

2.8 Strategies for improving quality in inclusive education

The success of inclusive education in South Africa is dependent on the ability of Education Support Services (ESS) personnel to make the required paradigm shift in their minds and execute their duties. SAQA outlines the following quality indicators:
• Aims must be explicit;
• Processes are identified;
• Procedures for quality management policies are in place;
• Sustainability of quality management strategies are in place;
• Ability to develop, deliver and evaluate learning programmes;
• The necessary financial, administrative and physical resources to deliver programmes are in place;
• Democratic modes of organisation and practice are in place;
• Clear learner-centred policies and ways of addressing learning programmes are required;
• Able to conduct off-site or work-site activities;
• Clear policies for assessment and its management exist; and
• Policies for programme development in terms of content, people, procedures, practices and resources exist (South Africa 2001:18).

The establishment of quality management is essential. SAQA has integrated the TQM principles, giving emphasis to quality development and quality management. The Education White Paper (South Africa 2001) suggests a realistic time of 20 years for the implementation of inclusive education and training system. The Education White Paper (South Africa 2001) breaks down the implementation plan as follows:

• Immediate to short-term steps (2001-2003);
• Medium-term steps (2004-2008); and
• Long-term steps (2009-2021).

Schwille (2009, cited in Ntombela 2011:7) suggests that educator development should include the following to enhance quality in inclusive education:

• Educators need opportunities to implement new strategies, with relevant support;
• Educators should be allowed to observe colleagues and to receive relevant feedback;
• Educators be allowed to collaborate about their professional development needs;
• There should be a balance between pedagogy and subject matter; and
• Educators should be allowed to conduct action research and discuss with fellow colleagues.

The adoption of the above will result in major demands from the Department of Education and may not necessarily be beyond the Department of Education, as it has been recognised in its long-term plans.

2.9 Conclusion

Inclusive education is a worldwide trend in education and is well documented. This means that in inclusive education, learners with barriers to learning must now be included in the mainstream school. The aim of inclusive education is to restructure schools so that they respond to the learning needs of all children. Inclusive education recognises that any child can experience challenges in learning, during the school career in the short term or long term and, therefore, the school needs to continually review its teaching and learning to meet the needs of all the learners. The implementation of inclusive education requires resources and commitment from the school with support from community and the government.

The vision of providing quality education for all children in an education and training system that responds and respects effectively to the diverse learning needs of every learner (South Africa 2001). The government policies that influence inclusive education are The White Paper on Education and Training in a Democratic South Africa –(1995), The South African Schools Act – (1996) and The White Paper on an Integrated National Disability – (1997). The policies are laudable in respect of inclusive education. It can be said that many problems of
inclusive education will undoubtedly create challenges for the educator. For successful implementation of inclusive education, drastic measures are necessary to address the problems.

Educational institutions have adopted the total quality management (TQM) concept within their institutions. TQM has become a catalyst for change in education. Quality education is only achieved when all learners are given equal opportunity to succeed. It could therefore be deduced that inclusive education and quality are inseparable concepts. The quality factor in primary schools will invariably affect the secondary schools and tertiary sector. This means that the TQM implementation in the primary schools may have an important impact in the whole educational system.

To address the challenges of inclusive education is dependent also on quality teacher education and training. Several international studies have found that educators’ attitude towards inclusive education has a direct relationship to their commitment to inclusive practices that influence the outcomes of their practice. The challenge for educators is to come to grips with the innovative methods of implementing education. Substantial effort is required from the various education departments to implement the paradigm shift towards inclusive education.

The research methodology for this study will be discussed in the next chapter.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In the previous chapter, the relevant literature was reviewed to lay the foundation for the study. The purpose of the study is to evaluate the perceptions of educators toward inclusive education and quality of teaching/learning in the foundation phase.

To place the empirical findings into perspective, it is important to understand the research methodology followed. The research design, study population, data collection techniques, instrument validity, reliability, recording of data and data analysis techniques will be discussed in this chapter.

3.2 Study type

Silverman (2010:05) identifies two types of research methods, namely, qualitative and quantitative methods. Flyvbejerg (2011:14) describes the quantitative method of research as data expressed in numbers and qualitative research as data expressed in words. Quantitative research is focused on the collection and analysis of numerical data and statistics (Jackson 2009:121). This study used the quantitative method.

Primary data was collected for this study using the survey method. A questionnaire consisting of thirty items was used to gather the needed information. Kotler and Armstrong (2010:134) affirm that the survey method is the most widely used method for primary data collection and suitable for collecting descriptive information. Surveys are administered to obtain data from a large number of respondents within a limited time frame (Naoum 2006:44). The questions were closed-ended with alternative choices provided to the respondents. Kotler and Armstrong (2010:142) assert that close-ended
questions include all the possible answers and respondents make choices among them. The questionnaires were self-administered.

### 3.3 Research design

Collis and Hussey (2003: 113) define research design as “the science (and art) of planning procedures for conducting studies so as to get the most valid findings” since the choice of a right research design is a key step of the empirical study and the success of the study. Jankowicz (2005: 196) describes research design as “the deliberately planned arrangement of conditions for analysis and collection of data in a manner that aims to combine relevance to the research purpose with economy of procedure”.

This quantitative study evaluates the perceptions of educators toward inclusive education. Cooper and Schindler (2003: 149) state that descriptive research is a type of study which tries to find out who, what, when, where, or how much.

The study also utilized a cross-sectional study to obtain information under field conditions. Cross-sectional studies are inexpensive and the most frequently used descriptive design in research. Collis and Hussey (2003: 61) state that cross-sectional studies are often used to investigate certain characteristics of a large number of people or organizations when there are constraints of time or resources.

### 3.4 Population

Welman, Mitchell and Kruger (2005:46) define a population as the study object, which may be made up of individuals, groups, organizations, human products and events. Jankowicz (2005: 202) states that a good sample design not only helps identify the kind of data, but also leads to efficient and accurate data collection. The target population refers to the total that is made up from units falling into various sub-groups in which the researcher might be interested. The selected sample, as a subset of the target population, provides data from which
one can draw and make decisions about the larger group and fully reflect the population (Wegner 2001: 169). Researchers usually draw conclusions about large groups of individuals by studying a small sample of the total population (Kotler and Armstrong 2010:139). The target population for this study is all foundation level educators at the fourteen selected schools in the eThekwini region.

3.5 Sample size

In research, a larger sample is preferable. However, this generalization does not fit all situations. To some extent, the size of an adequate sample depends on how homogeneous or heterogeneous the population is, in other words, how alike or different its members are. A heterogeneous population requires larger samples, whereas smaller samples are adequate for a homogeneous population (Leedy and Ormrod, 2005: 207-208). According to Sekaran and Bougie (2010: 294-295), sample sizes larger than 30 and less than 500 are appropriate for most research. The sampling technique for this study was purposive/judgmental and included all foundation phase educators. In light of the small sampling frame, the questionnaire was administered amongst all educators in the foundation phase in the selected schools. The number of foundation phase educators in each school was confirmed telephonically by the school secretary. After the confirmation, 118 questionnaires were personally distributed to the principals of the 14 selected schools.

3.6 Sampling method

Kotler (2006:69) contends that non-probability samples include elements from the population selected in a non-statistical manner. Welman, Kruger and Mitchell (2005:69) rightly suggest that non-probability sampling offers the advantage of being less complicated and more economical in terms of time and financial constraints. Convenience sampling is a non-probability sampling
technique where subjects are selected because of their convenient accessibility and proximity to the researcher (Castillo 2009:06). Leedy and Ormrod (2005: 206) indicate that non-probability is quite subjective and the surveys can produce acceptable results more quickly and at a low cost than a probability sampling.

The education department in KwaZulu-Natal Province consists of four regions, namely, eThekwini, uKhahlamba, uMgungundlovu and Zululand. For this study, judgmental sampling was used to select fourteen schools in the eThekwini region. Judgmental sampling is a non-probability sampling technique where the researcher selects units to be sampled based on researcher’s knowledge and professional judgment (Castillo 2009:06). Furthermore, selecting these fourteen schools limited the cost and time factors.

3.7 Questionnaire design

Collis and Hussey (2003: 173) report that a questionnaire consists of carefully structured questions, selected after considerable testing, with a view to eliciting reliable responses from a chosen sample. Wegner (2001: 17) claims that a questionnaire, as one of the most widely used survey data collection techniques, can be used to collect data in all interview situations, with the following advantages:

- Each respondent is asked the same question;
- They can be administered at minimum cost;
- They provide an efficient way of collecting responses from a large sample prior to the quantitative analysis; and
- The respondents remain anonymous and can provide a truthful answer without fear of victimisation, and allow contact with inaccessible respondents such as CEO’s.

This study used structured questionnaires as a means of gathering information.
The relevant literature and survey instruments developed by past studies provided the basis for developing the questionnaire for this study. The questionnaire employed for this study was adapted from previous studies of Pottas (2005), Mthethwa (2008), Zulu (2009) and Toremen, Karakus and Yasan (2009).

The data was obtained by means of the questionnaire, requesting respondents to indicate their levels of agreement with each statement. To accomplish this request, a five-point Likert scale was used to score the questions. Scoring for the scale was as follows: (1) strongly disagree, (2) disagree, (3) neutral, (4) agree and (5) strongly agree. The Likert scale is the most widely used form of scaled items where the respondent chooses a point on the scale that best represents his/her view (Leedy and Ormrod, 2005: 185). The respondents remained anonymous throughout the study. All statements were positively worded.

Section A of the questionnaire consisted of 30 statements covering five categories as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Statements pertaining to the category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Statements 1-7</td>
</tr>
<tr>
<td>Attitude</td>
<td>Statements 8-12</td>
</tr>
<tr>
<td>Resources</td>
<td>Statements 13-19</td>
</tr>
<tr>
<td>Experience</td>
<td>Statements 20-22</td>
</tr>
<tr>
<td>Quality</td>
<td>Statements 23-30</td>
</tr>
</tbody>
</table>

Section B focused on respondents’ general biographical information such as, gender, age, educational qualifications, experience and level being taught. This section included one open-ended question for suggestions/observations in respect of inclusive education in the mainstream school. A covering letter
ensured that the respondents were informed of the nature and purpose of the research.

3.8 Pilot testing

Pre-testing of the questionnaire is an important step in the entire research process. Churchill and Lacobucci (2005: 254) state that the real test of a questionnaire is how it performs under actual conditions of the data collection. The process of the pre-test may be necessary to make amendments to the questionnaire and to test the face validity of the survey instrument. The questionnaire was checked and evaluated by the supervisors of this study and a statistician. Then an appropriate pre-testing study was conducted amongst five experienced educators who were not included in the study. The suggestions of pre-testing provided valuable information for avoiding ambiguous questions and the questionnaire was edited accordingly.

The questionnaire was in the form of closed-ended questions in which respondents were required to make choices from a list of possible responses. Research questions were structured in the simplest terms, making them easy to be understood by respondents.

3.9 Data Collection

After permission from the Department of Education was obtained, the principals of the selected schools were contacted telephonically. The principal was briefed about the research and a suitable time was negotiated to personally deliver and collect the questionnaires. The questionnaires were addressed to educators in the foundation phase. The principals showed an overwhelming interest in the study.
3.10 Data analysis

After the data has been collected, the next step in the research process is the analysis of the data. The purpose of data analysis is to interpret and draw conclusions from the mass of collected data. The researcher may apply a variety of techniques, beginning with simple frequency analysis (percentages) to sample statistics measures (mode, median, mean, range, standard deviation) to culminating into complex multivariate techniques (Hair et al. 2000: 42).

In this study, the collected data was analysed with SPSS version 20.0. The appropriate descriptive and inferential analysis techniques were applied to determine the perceptions of foundation phase educators of inclusive education and quality of teaching/learning. The whole data analysis process included data preparation and various tests about the importance of different statements pertaining to each category.

3.11.1 Data preparation

Data preparation includes editing, coding and data entry. To ensure that gathered data was accurate and complete, editing, as the first step in any analysis process, includes checking for mistakes and correcting the errors (Sudman and Blair 2002:414). Coding, which refers to the process of classifying raw data gathered and converting data to numerical code for helping the researcher to make analysis more efficient, was utilized. Data entry, as an important step to analysis of the responses from a large questionnaire survey using a computer statistics package, was undertaken by a statistician (Cooper and Schindler 2003; 454).

3.11.2 Data analysis and interpretation of the results

After the data was collected, punched and stored, they were carefully summarized and analysed by the use of statistical techniques. Since the
The purpose of statistics is different, statistical procedures have two major categories, namely, descriptive statistics and inferential statistics, respectively (Collis and Hussey 2003: 196). The related statistical analysis processes in the study are covered under the following headings:

3.11.2.1 Descriptive statistics

Descriptive statistics is used to identify or summarize the general nature of all the responses obtained. Kotler and Armstrong (2010:130) state that the purpose of descriptive research is to describe factors such as the demographics or perceptions of individuals about an outcome. In this study, descriptive statistics such as frequencies and percentages were used.

However, for the purposes of describing the results and drawing inferences from the data, central tendency and dispersion are the most important descriptive parameters. Cooper and Schindler (2003:474) report that a measure of central tendency is a convenient way of describing a large frequency distribution by means of a single value. The main measures of central tendency includes: the mean, the median, and the mode. The other is measure of dispersion which is a way of describing the spread of values in a data distribution. The measures of location and dispersion are often used together for obtaining a concise and useful description of the distribution of the data. The standard deviation is the most important measure of spread because it uses every value and is expressed in the same units as the original data (Cooper and Schindler 2003: 475).

3.11.2.2 Inferential statistics

Inferential statistics draw conclusions about a complete population by quantitative data collected from a sample (Leedy and Ormrod 2005:30). Inferential statistics is used when ideas, hypotheses or predictions need to be tested. All measures of inferential statistics are divided into four groups in terms
of estimating from samples, measuring association, measuring difference, and forecasting (Collis and Hussey 2003: 197). In this research, some measures of the first three groups were used as follows:

- **Chi-Square test**

According to Welman, Kruger and Mitchell (2005:231), chi-square tests determine if the discreet classes, into which interval or ratio variables are grouped, are statistically significantly related to another variable and the relationship is not caused by chance. Chi-square tests were used to calculate the mean of the five themes used.

- **Analysis of Variance (ANOVA)**

McDaniel and Gates (2005: 315) indicate that ANOVA is a statistical procedure in order to look for differences among three or more means by comparing the variances both within and across groups. In this study, ANOVA was used to determine whether perceptions are influenced within the different age groups and experience.

- **Factor analysis**

Factor analysis is applied as a statistical technique to reduce data. Factor analysis is used in survey research, where a researcher wishes to represent a number of questions with a small amount of hypothetical factors. Factor analysis aims at establishing whether the multiple measures do represent the same outcome (Field 2005). Each question, on its own, would be inadequate in measuring perceptions towards inclusive education, but together they may provide a more superior measure of perception.

### 3.12 Validity and reliability

As with computer applications, the spread sheets allow the researcher to save, store and easily update information as needed, as well as print information when required. Reducing the possibility of getting the wrong answers means
that the researcher must pay attention to two particular criteria of research design: reliability and validity, which are the discussed below.

### 3.12.1. Validity

Leedy and Ormrod (2005:28) define validity as the degree to which the research findings accurately represent what they actually intended to measure. According to De Vos (2002: 167), there are four types of validity. These are:

- **Face validity** – it refers to whether the statements are appropriate; it relies on the subjective judgment of the researcher;
- **Content validity** – it is the accuracy with which an instrument measures the contents being studied;
- **Criterion validity** – it is determined by relating the performance of one measure against another with the second measure checking the accuracy of the first measure; and
- **Construct validity** – it is the degree to which the content of the study is actually measured by the questionnaire.

In this study, the above-mentioned validation methods were utilized. The researcher took the following actions to ensure validity:

- The questionnaire was subjected to academics and professionals in the field and their opinion was taken into account; and
- The questionnaire was subjected to a pre-test group who had characteristics similar to those of the target group.

### 3.12.2 Reliability

Welman, Mitchell and Mitchell (2005:145) explain reliability as the consistency of performance of a measuring instrument. This means that the measuring
instrument must deliver similar results consistently. Saunders et al. (2003: 106) assert that there are four threats to reliability, namely:

- Subject error – choose a neutral time for respondents to complete the questionnaire;
- Subject bias – respondents may be answering what thought the interviewer wanted to hear;
- Observer error - the different approaches to eliciting answers; and
- Observer bias - as with observer error, with different people interpreting the same research, there may be different approaches to interpreting the replies.

Therefore, the researcher employed the following measures to ensure the reliability of the study under investigation:

- A pre-test study of the questionnaire was to make certain that all questions and statements were both relevant and easily understood;
- The questionnaires of the study ensured the anonymity of the respondents;
- The questionnaires used a closed question format; and
- Cronbach alpha was calculated to measure the reliability of the measurement,

3.13 Conclusion

This chapter discussed the research design, research method, sampling design, questionnaire design, reliability and validity, and data analysis. The research was descriptive, utilizing an adapted instrument to evaluate the perceptions of foundation phase educators toward inclusive education and the quality of teaching/learning. The aim was to analyse the empirically gathered data and
identify any gaps between quality and inclusive education in the foundation phase.

The findings from the empirical study will be discussed in Chapter 4.
CHAPTER FOUR

DATA ANALYSIS

4.1 Introduction

In the previous chapter, the research design, data collection method and questionnaire design were discussed. The purpose of this chapter is to present, interpret and discuss the findings of the empirical study. The data collected from the responses was analyzed with SPSS (Statistical Package for Social Scientists), version 20.0. The results are presented in the form of graphs, cross tabulations and other figures.

4.2 Response rate

The questionnaires were administered at fourteen mainstream schools in the eThekwini region in KwaZulu-Natal Province. The total number of respondents that completed the questionnaires, as part of the survey, was 107, of the planned sample of 118. Two questionnaires were incomplete and one questionnaire was completed by a grade R educator, who is not part of the target population. This resulted in an achieved sample of 104 and a response rate of 88 percent.

4.3 Analysis of the reliability of the questionnaire through Cronbach’s alpha

The two most important aspects of precision are reliability and validity. Reliability is computed by taking several measurements on the same subjects. Reliability refers to the consistency of a questionnaire (Maree 2010:147). Good reliability shows that respondents are completing the questions in a consistent way and thus the individual questions should have scores which correlate (Hair, Babin, Money and Samouel 2003:170). The authors explain that a reliability
The coefficient of 0.70 or higher is considered as “acceptable”. The various categories were tested for reliability scores. The results are presented below in Table 4.1.

**Table 4.1 Reliability scores**

<table>
<thead>
<tr>
<th>Category</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>.191</td>
</tr>
<tr>
<td>Attitude</td>
<td>.595</td>
</tr>
<tr>
<td>Resources</td>
<td>.645</td>
</tr>
<tr>
<td>Experience</td>
<td>.458</td>
</tr>
<tr>
<td>Quality</td>
<td>.652</td>
</tr>
<tr>
<td>Overall</td>
<td>.792</td>
</tr>
</tbody>
</table>

The overall reliability score for the variables that constitute the study is high and acceptable (0.792). This implies a level of consistent scoring across the categories. Therefore, the results imply that the research instrument (questionnaire) has internal consistency and reliability. However, scores for some categories are slightly below the acceptable norm. This is mainly due to the categories in the questionnaire being developed for this study. The first section on knowledge has a low reliability score. This will be investigated in the section on factor analysis.

### 4.4 Factor analysis

Factor analysis is used to study the patterns of relationship among many dependent variables, with the goal of discovering something about the nature of the independent variables that affect them, even though those independent variables were not measured directly (Leedy and Ormrod 2005: 161). In this research, the five categories are the independent variables and the statements
that constitute them are the dependent variables. The inferred independent variables are called factors.

### 4.4.1 Importance of factor analysis

Factor analysis is a statistical technique which is used to reduce data in order to work out which items belong together. These items should be answered in a similar way and, therefore, measure the same factor (Maree 2010:218).

Factor analysis is a statistical technique whose main goal is data reduction. A typical use of factor analysis is in survey research, where a researcher wishes to represent a number of questions with a small number of hypothetical factors. For example, as part of a national survey on political opinions, participants may answer three separate questions regarding environmental policy, reflecting issues at the local, state and national level. Each question, by itself, would be an inadequate measure of attitude towards environmental policy, but together they may provide a better measure of the attitude (Maree 2010:221). Factor analysis can be used to establish whether the three measures do, in fact, measure the same thing. If so, they can then be combined to create a new variable, a factor score variable that contains a score for each respondent on the factor.

The rotated component matrix for the different factors is reflected in Tables 4.2 to 4.6. With reference to these tables, the principle component analysis was used as the extraction method, and the rotation method was Varimax with Kaiser Normalization. This is an orthogonal rotation method that minimizes the number of variables that have a high loading on each factor (Stewart 1981:59). It simplifies the interpretation of the factors (Malhotra 2010:639).
### Table 4.2: Factor loading for knowledge

Rotated Component Matrix

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learners with barriers in learning should be accommodated in separate</td>
<td>.194</td>
<td>-.584</td>
<td>.070</td>
</tr>
<tr>
<td>special schools.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inclusive education works well in countries where it has been</td>
<td>.435</td>
<td>.396</td>
<td>.429</td>
</tr>
<tr>
<td>implemented.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learners with barriers to learning should be assessed in order to</td>
<td>.773</td>
<td>-.075</td>
<td>-.014</td>
</tr>
<tr>
<td>identify weaknesses.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Placement tests should be used to place learners with barriers in</td>
<td>.829</td>
<td>-.057</td>
<td>-.057</td>
</tr>
<tr>
<td>special classes.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The current ethos of my school considers barriers to learning.</td>
<td>-.077</td>
<td>.308</td>
<td>.813</td>
</tr>
<tr>
<td>Inclusive education addresses the challenges faced by learners that</td>
<td>.095</td>
<td>.816</td>
<td>.063</td>
</tr>
<tr>
<td>experience &quot;barriers to learning&quot;.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inclusive education practices demand little financial support from the</td>
<td>-.233</td>
<td>.311</td>
<td>.574</td>
</tr>
<tr>
<td>schools resources.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 4.3: Factor loading for attitude

Rotated Component Matrix

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Component 1</th>
<th>Component 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>In this school, learners are viewed as most important customers.</td>
<td>.030</td>
<td>.968</td>
</tr>
<tr>
<td>Educators are prepared for inclusive education classroom management.</td>
<td>.742</td>
<td>.177</td>
</tr>
<tr>
<td>Learners requiring high – intensity support should be</td>
<td>.639</td>
<td>-.257</td>
</tr>
<tr>
<td>accommodated in mainstream schools.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am comfortable to teach learners with barriers in the mainstream class.</td>
<td>.785</td>
<td>.099</td>
</tr>
<tr>
<td>Inclusive education plays an important role in the social development</td>
<td>.679</td>
<td>-.034</td>
</tr>
<tr>
<td>of learners with barriers.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Table 4.4:  Factor loading for resources

**Rotated Component Matrix**

<table>
<thead>
<tr>
<th>Resources</th>
<th>Component 1</th>
<th>Component 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mainstream schools can provide for learners with barriers.</td>
<td>.736</td>
<td>-.244</td>
</tr>
<tr>
<td>The school should supply assistants to help with individual learners with barriers.</td>
<td>.065</td>
<td>.805</td>
</tr>
<tr>
<td>District – based professional support services are adequate for inclusive education implementation.</td>
<td>.506</td>
<td>-.099</td>
</tr>
<tr>
<td>In this school, effective and constant communication motivates learners and educators.</td>
<td>.740</td>
<td>.284</td>
</tr>
<tr>
<td>There is a climate of respect, co-operation and trust in our school that motivate our educators.</td>
<td>.789</td>
<td>.127</td>
</tr>
<tr>
<td>Physical working conditions in our school motivate educators.</td>
<td>.533</td>
<td>.304</td>
</tr>
<tr>
<td>Large class sizes have a detrimental effect on the implementation of inclusive education.</td>
<td>-.012</td>
<td>.803</td>
</tr>
</tbody>
</table>

Table 4.5:  Factor loading for experience

**Rotated Component Matrix**

<table>
<thead>
<tr>
<th>Experience</th>
<th>Component 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female educators are able to handle learners with barriers better than male educators.</td>
<td>.656</td>
</tr>
<tr>
<td>Experienced educators are able to implement inclusive education effectively.</td>
<td>.696</td>
</tr>
<tr>
<td>Inadequate experience of educators may impact negatively in implementing inclusive education.</td>
<td>.725</td>
</tr>
</tbody>
</table>
Table 4.6: Factor loading for quality

Rotated Component Matrix

<table>
<thead>
<tr>
<th>Quality</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>The level of education training plays an important role in implementing inclusive education.</td>
<td>.018</td>
<td>-.083</td>
<td>.474</td>
</tr>
<tr>
<td>Our school manager gives all the educators direction to improve quality.</td>
<td>.813</td>
<td>.152</td>
<td>.046</td>
</tr>
<tr>
<td>Interventions for inclusive education are rendered continuously in this school to improve the quality.</td>
<td>.452</td>
<td>.651</td>
<td>.027</td>
</tr>
<tr>
<td>There is evidence of quality leadership in this school for inclusive education.</td>
<td>.611</td>
<td>.650</td>
<td>.099</td>
</tr>
<tr>
<td>All the stakeholders in our school are being treated with respect and dignity.</td>
<td>.694</td>
<td>.302</td>
<td>.250</td>
</tr>
<tr>
<td>My school's policy makes provision for inclusive education.</td>
<td>.757</td>
<td>-.147</td>
<td>-.315</td>
</tr>
<tr>
<td>It is a challenge to teach learners with barriers in the mainstream classroom.</td>
<td>-.012</td>
<td>.023</td>
<td>.869</td>
</tr>
<tr>
<td>Everyone can learn in the mainstream classroom, including a learner with barriers.</td>
<td>-.090</td>
<td>.811</td>
<td>-.185</td>
</tr>
</tbody>
</table>

It is noted that it was only the variables that constituted the category of “experience” loaded perfectly along one factor. This means that the statements' variables that constituted this category perfectly measured the category. The variables that constituted the other categories spread across various components. All of the categories have statements that overlap, indicating a mixing of the factors. This means that the questions in the overlapping components did not specifically measure what it set out to measure or that the component split along categories. One possibility is that respondents did not clearly distinguish between the statements constituting the categories. This could be with respect to interpretation or inability to distinguish what the statements were measuring.
4.5 Demographic details of respondents

This section describes the demographic profile of the respondents, including gender, age, qualifications, experience and level of grade being taught of the respondents. It is presented using tables, cross-tabulations and various types of graphs.

4.5.1 Gender and age

Table 4.7 is a summary of the respondents by gender and age.

The sample was overwhelmingly female (95.2%). It seems that very few male educators specialize to teach in the foundation phase. The sample also reflects that there are no male educators in the under 35 age category. This could imply that a great number of prospective male educators would rather choose other phases than the foundation phase, or do not choose teaching as a profession. All of the male respondents (4.8%) and 44.2% of the female respondents were between the ages of 46 – 55 years. This age group comprised 49.0% of the total number of respondents. The demographic age profile of this study indicates that the 46 – 55 age group was the dominant group. More than three-quarters of the respondents (76.8%) were older than 35 years. This is useful in terms of the study because of their experience.
Table 4.7 Gender and age of respondents

<table>
<thead>
<tr>
<th>Age</th>
<th>Count</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 - 25 years</td>
<td>Count</td>
<td>0</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>0.0%</td>
<td>8.7%</td>
<td>8.7%</td>
</tr>
<tr>
<td>26 - 35 years</td>
<td>Count</td>
<td>0</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>0.0%</td>
<td>14.4%</td>
<td>14.4%</td>
</tr>
<tr>
<td>36 - 45 years</td>
<td>Count</td>
<td>0</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>0.0%</td>
<td>24.0%</td>
<td>24.0%</td>
</tr>
<tr>
<td>46 - 55 years</td>
<td>Count</td>
<td>5</td>
<td>46</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>4.8%</td>
<td>44.2%</td>
<td>49.0%</td>
</tr>
<tr>
<td>56 years and older</td>
<td>Count</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>0.0%</td>
<td>3.8%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>5</td>
<td>99</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>4.8%</td>
<td>95.2%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

4.5.2 Experience

Most of the respondents are mature and experienced educators, as indicated in the Figure 4.1 below. Hence, the responses are from seasoned respondents in their field of expertise. 62% of the respondents had been teaching for more than 11 years. This finding emphasizes the point that the cohort was mainly constituted by experienced educators. This would lend credence to the reliability and informed nature of the responses due to the lengthy experience of the educators.
4.5.3 Qualifications

Figure 4.2 indicates the qualifications of the respondents. Nearly 8 out of every 10 respondents had a diploma or degree qualification as their highest qualification. About 2 percent of the educators were not qualified and 12.7 percent of staff had a post graduate qualification. The current conditions of service do not provide any incentives for educators who improve their qualification above the required minimum of M+ 4 qualifications. This may be the reason for many staff not pursuing further studies.
4.5.4 Level of grade being taught

The foundation phase includes grades one, two and three. Figure 4.3 illustrates the level of grade being taught by the respondents. There is an approximate split of a third of the respondents for each of the grades. This finding indicates that all three grade educators are equally represented in this study.
4.6 Section analysis

The study evaluates the challenges of inclusive education among foundation phase educators on the quality of teaching and learning. The following sections indicate the scoring patterns of the respondents on 30 statements. The statements have been grouped into five categories, namely, knowledge, attitude, resources, experience and quality.

4.6.1 Category: Knowledge

This section analyses the first seven questions. Figure 4.4 is a summary of the responses for the knowledge category. The purpose of these questions was to evaluate the educators’ general understanding of inclusive education, with particular reference to barriers to learning. As depicted in Figure 4.4, 81.6% of the respondents agree that learners with barriers should be accommodated in separate special schools. This is contrary to the literature review (South Africa 2001b), where it was reported that 85% of the total number of learners who are experiencing barriers to learning are catered in the mainstream classes. The findings also showed that 46.5% of the respondents indicated that inclusive
education works well in countries where it has been implemented. The international practice of inclusive education has been incorporated into South African policy and guidelines. It also reported that 68.0% of the respondents indicated that their school ethos considers barriers to learning and 55.7% indicated that inclusive education addresses learners that experience “barriers to learning”. It is evident from the responses that general knowledge on what inclusive education and barriers to learning is somewhat narrow. This narrow perception, namely, that inclusive education is synonymous with barriers to learning may be an impeding factor in implementing inclusive education in mainstream schools.

The majority of respondents (98.1%) indicated some form of assessment are necessary for identifying learners with weaknesses and also that placement tests should be used to place the learners in special classes (91.1%). A study conducted by Hay, Smith and Paulsen (2001:213) showed that educators in South Africa have a definite lack of knowledge in inclusive education. Further, 55.7% of the respondents indicated that inclusive education addresses the challenges faced by learners that experience “barriers to learning”. Inclusive education practices show higher levels of negative responses, with 61% believing that finances are not sufficient to implement practices. It can be inferred that substantial effort is required to implement the paradigm shift towards inclusive education (Ainscow 1995:1).
Figure: 4.4 Category: Knowledge

Figure 4.4 summarises the findings relating to the statements constituting the knowledge category.

4.6.2 Category: Attitude

It is documented that the attitude of educators in the foundation phase plays an important part in the successful implementation of inclusive education. This section analyses questions 8 to 12. Figure 4.5 reflects a summary of the
responses. All learners share equal value and status and therefore exclusion of learners with barriers to learning from the mainstream is discriminating. 85.4% of the respondents’ view the learners as the most important customers which is indicative of view of educators regarding the status of learners (South Africa 1997:10-11). It is clear as reflected in Figure 4.5 that educators are not prepared for inclusive education classroom management (53.9%) and being able to accommodate learners requiring support in the mainstream school (70.3%).

Figure 4.5: Attitude
Most of the respondents indicated that inclusive education would play an important role in helping learners break down social barriers (76.2%). However, the reality is that the majority of the educators (51.5%) are uncomfortable to teach learners with barriers in the mainstream class. In section 2.5 of the literature, it was reported that changing attitudes, behaviour, teaching methodologies, curricula and the environment to meet the needs of learners was necessary in building an inclusive education and training system. These results are in line with the findings by Zulu (2009:60) that most primary school educators have a negative attitude toward inclusive education, which can be attributed to lack of skills and that inclusive education is still new in South Africa and most educators are not prepared for inclusive education classroom management (53.9%).

4.6.3 Category: Resources

This section includes questions 13 to 19 and focuses on resources of the school to accommodate inclusive education. There has to be adequate teaching support to facilitate the implementation of inclusive education (see section 2.6). Figure 4.6 reflects a summary of the responses to questions relating to resources. As shown in Figure 4.6 only 45.5% of the respondents feel that mainstream schools can provide for learners with barriers to learning and 94.1% indicate the need for support staff to implement inclusive education. It can be inferred from the above that the many schools may be under-resourced and therefore the implementation of inclusive education may be a challenge. This is supported by 45.5% only agreeing that mainstream schools can provide for learners with barriers.

The statement that “District-based professional support services are adequate for inclusive education implementation” had a negative response level of agreement of 64.0%. It seems imperative to have professional support services from the district office to implement inclusive education. 80.4% of the
respondents agreed that in their school, effective and constant communication motivates learners and educators, while 77.5% indicated that there is a climate of respect, co-operation and trust in their school which motivates their educators. However, 96.1% confirmed that large class sizes have detrimental effect on the implementation of inclusive education. The first statement in this category indicates that there were as many respondents who agreed with the statement as there were those that did not.

Figure: 4.6 Category: Resources
4.6.4 Category: Experience

The new curriculum in South Africa expects educators to accommodate learner diversity (see section 2.5). A study by Avramidis and Norwich (2002:137) found that educators with fewer years of teaching were positive towards inclusive education than those with more years of teaching experience. This section analyses questions 20 to 22. Figure 4.7 is a summary of the responses relating to experience.

**Figure 4.7 Category: Experience**

- Female educators are able to handle learners with barriers better than male educators.
- Experienced educators are able to implement inclusive education effectively.
- Inadequate experience of educators may impact negatively in implementing inclusive education.
Assessment, both formative and summative, is an important component in the inclusive education school focusing on curriculum, instruction and measurement and outcomes (Sands et al. 2000:249). An educator’s experience can refine teaching activities to optimize student learning (Ntombela 2011:6). Table 4.7 reflected that 95.2% of the respondents were female. It is interesting that only 21.6% of the respondents agree with the statement that female educators are able to handle learners with barriers than their male counterparts. Majority of the respondents for statement 21(57.8%) and statement 22(73.3%) agree that the experience of educators will have an impact in implementing inclusive education. The attitude of educators can change as a function of experience. Nel et al. (2011:130) report that educators’ attitudes can be changed with planned information and the necessary support structures.

4.6.5 Category: Quality

The success of inclusive education is dependent on quality teacher education and training (Pottas 2005:52). This section reports on the responses to the last category of the questionnaire, namely, questions 23 to 30 relating to quality. Figure 4.8 provides a summary of the responses. Five statements in this category have an over 70 percent agreement. The results reveal that 85.1% of the respondents indicated that training plays an important role in implementing inclusive education and 81.4% agreed that their school manager gives direction to improve quality. It was reported in section 2.7.1 of the literature review that educators need support with further training and development. Education, as a component of TQM, implies that educational administrators will be responsible for educating staff. Strong administrative leadership and attention to quality of teaching, as reported in section 2.7.1, support statement 24, that “experienced educators are able to implement inclusive education effectively”. Successful education depends on empowering, motivating and training educators (Pottas 2005:52).
The results in Figure 4.8 show that 83.3% of the respondents agreed that all stakeholders at school are being treated with respect and dignity. The school should use the creative powers and abilities of all its stakeholders. Every learner has a fundamental right to education, and must be given the opportunity to achieve and maintain an acceptable level of learning (Lomofsky and Lazarus 2001:17). As illustrated in Figure 4.8, 88.3% of respondents agree that it is a challenge to teach learners with barriers in the mainstream classroom.

Two of the statements in this category have a moderate level agreement. In the third statement, 50% of the respondents agree that interventions for inclusive education are rendered continuously to improve quality. The continual improvement principle of TQM means that every new day should not be the same as the previous day (Yasan 2009:31). The fourth statement with a moderate level agreement in this category shows that 61% of the respondents agree that there is evidence of quality leadership for inclusive education. The objective of the Integrated Quality Management System (IQMS) is to ensure quality of public education and to constantly improve the quality of teaching and learning (see section 2.7.2). In addition, 72% of respondents indicated that their school's policy makes provision for inclusive education.
Figure 4.8 Category: Quality

Figure 4.8 summarises the findings relating to the statements constituting the quality category.

- The level of education training plays an important role in implementing inclusive education.
- Our school manager gives all the educators direction to improve quality.
- Interventions for inclusive education are rendered continuously in this school to improve the quality.
- There is evidence of quality leadership in this school for inclusive education.
- All the stakeholders in our school are being treated with respect and dignity.
- My school’s policy makes provision for inclusive education.
- It is a challenge to teach learners with barriers in the mainstream classroom.
- Everyone can learn in the mainstream classroom, including a learner with barriers.
One statement in this category has a higher level of disagreement. Only 34.7% of the respondents are in agreement that learners with barriers can learn in the mainstream classroom. The focus of inclusive education shifts from what is wrong with the learner to contextual factors that interfere with learning (South Africa 2001). It was reported that South Africa must move swiftly towards an inclusive paradigm in the South African education system, in order to cater for the needs of all learners.

4.7 Respondents’ suggestions and observations

The final question was an open-ended question requesting respondents’ suggestions and observations with respect to inclusive education in their school. The respondents were required to identify the challenges or reasons why learners with “barriers to learning” should or should not be accommodated in mainstream schools. The open-ended question is part of the item analysis process. Table 4.13 reflects the frequency distribution of the overall feelings expressed by educators.

Table 4.8 Educators’ concern

<table>
<thead>
<tr>
<th>CONCERNS</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Large class size</td>
<td>49</td>
</tr>
<tr>
<td>2. Educators need training</td>
<td>25</td>
</tr>
<tr>
<td>3. Resources</td>
<td>24</td>
</tr>
<tr>
<td>4. Language barrier</td>
<td>19</td>
</tr>
<tr>
<td>5. Need for remedial educators</td>
<td>18</td>
</tr>
<tr>
<td>6. Workshops</td>
<td>14</td>
</tr>
<tr>
<td>7. Parental involvement</td>
<td>11</td>
</tr>
</tbody>
</table>
The analysis reflected in Table 4.8 reveals divergent responses. A major concern is that the classrooms are small and inadequate in accommodating a class size of 40 plus learners. It is well documented that the educator-learner ratio and class size will impact on the quality of teaching and learning. One of the responses with respect to class size is:

“The numbers in a mainstream school does not allow for individual attention and this is the only way to help a learner who has barriers”.

Educators feel that it is not possible to meet all the needs of learners in a large class. The data indicates that 25% of the respondents expressed the need for educators' training in inclusive education. This response is not surprising as the demographic age profile of this study indicates that the 46 – 55 age group was the dominant group. The under-graduate teacher training curriculum for the dominant group may not have necessarily included inclusive education. In addition, 14% of the respondents felt that there is a need for workshops to empower educators. With regard to training and workshops, two responses were:

“In a mainstream school learners with barriers are expected to perform at the same level as ‘normal’ learners”; and

“Assessments for the year are planned according to the ability of all learners. Learners with barriers write the same assessment tests and are expected to pass. Poor results – educator is made accountable”.

Educators need support with further training and development to cope with challenges and keep abreast with developments (Beyers and Hay 2007:395). It was reported in Section 2.5 that few educators are trained to provide additional support to learners with special needs.
The third major issue, as indicated in Table 4.8, is resources. Learners find themselves in the mainstream classrooms where they are expected to excel without any additional support (Beyers and Hay 2007:395). Schools need textbooks and learning material to accommodate the large number of learners in a single class. In an inclusive class, sharing of learning material will not allow for learners to work at a different pace. It was reported in section 2.2.3 that education for learners with barriers at mainstream schools should be provided with relevant educational support. In this regard, the responses were:

“A teacher assistant would be a recommendation to assist in the classroom”.

“Schools need specialized educators. Suitable resources and a suitable environment for learners must be provided to make learners feel comfortable”.

“Learning barriers” was a concern expressed by 19% of the respondents. Barriers to learning and learning needs could be either permanent, recently acquired, fluctuating or circumstantial (South Africa 2001b). Two of the responses in this regard were:

“Learners being taught in a language that is not their home language – seen as a barrier”; and

“On admission of a learner to mainstream school, learners must be accepted with evidence that an assessment was done. This provides an exact diagnosis of the ‘barriers to learning’”.

As the data suggests, a need for remedial educators was expressed by 18% of the respondents. They seem to feel inadequate to detect the individual learner’s ‘barriers to learning’ and provide individual attention to all learners in the classroom (Ainscow 1991:3). The following responses support this shortcoming:
“The psychological services of the Department of Education are not empowering educators to deal with these barriers. Rather the responsibility is passed on educators of mainstream schools”; and

“Learners face a problem of low self-esteem if placed in a remedial school”.

Inclusive education is a process and is concerned with the identification and removal of barriers (Jha 2002:15). The final issue expressed by 11% of the respondents is that of parental involvement in their children’s learning and development. Parents are important stakeholders, but it seems that their involvement needs to be enhanced. The implementation of inclusive education requires resources and commitment from the school with support from the community and government (Prinsloo 2001:344).

4.8 Hypothesis testing

The traditional approach to reporting a result requires a statement of statistical significance. According to Gaur and Gaur (2009:33), hypothesis testing is commonly used to test significant relationships such as the assumption of some characteristic that could be supported or rejected by empirical evidence. A p-value is generated from a test statistic. A significant result is indicated with "p < 0.05".

The chi-square test was performed to determine whether there was a statistically significant relationship between the variables (rows vs. columns).

The null hypothesis states that there is no association between the variables. The alternate hypothesis indicates that there is an association. Table 4.14 below summarizes the results of the chi square tests.
<table>
<thead>
<tr>
<th>Table 4.9: Chi-Square Test</th>
<th>Gender</th>
<th>Age</th>
<th>Educational qualification</th>
<th>Experience in the foundation phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learners with barriers in learning should be accommodated in separate special schools.</td>
<td>0.899</td>
<td>0.452</td>
<td>0.383</td>
<td>0.878</td>
</tr>
<tr>
<td>Inclusive education works well in countries where it has been implemented.</td>
<td>0.387</td>
<td>0.694</td>
<td>0.915</td>
<td>0.666</td>
</tr>
<tr>
<td>Learners with barriers to learning should be assessed in order to identify weaknesses.</td>
<td>0.011*</td>
<td>0.7</td>
<td>0.356</td>
<td>0.964</td>
</tr>
<tr>
<td>Placement tests should be used to place learners with barriers in special classes.</td>
<td>0.803</td>
<td>0.271</td>
<td>0.772</td>
<td>0.020*</td>
</tr>
<tr>
<td>The current ethos of my school considers barriers to learning.</td>
<td>0.001*</td>
<td>0.496</td>
<td>0.832</td>
<td>0.43</td>
</tr>
<tr>
<td>Inclusive education addresses the challenges faced by learners that experience “barriers to learning”.</td>
<td>0.169</td>
<td>0.769</td>
<td>0.354</td>
<td>0.172</td>
</tr>
<tr>
<td>Inclusive education practices demand little financial support from the schools resources.</td>
<td>0.927</td>
<td>0.158</td>
<td>0.408</td>
<td>0.033*</td>
</tr>
<tr>
<td>In this school, learners are viewed as most important customers.</td>
<td>0.773</td>
<td>0.346</td>
<td>0.941</td>
<td>0.020*</td>
</tr>
<tr>
<td>Educators are prepared for inclusive education classroom management.</td>
<td>0.139</td>
<td>0.675</td>
<td>0.212</td>
<td>0.15</td>
</tr>
<tr>
<td>Learners requiring high – intensity support should be accommodated in mainstream schools.</td>
<td>0.616</td>
<td>0.703</td>
<td>0.042*</td>
<td>0.59</td>
</tr>
<tr>
<td>I am comfortable to teach learners with barriers in the mainstream class.</td>
<td>0.906</td>
<td>0.187</td>
<td>0.432</td>
<td>0.483</td>
</tr>
<tr>
<td>Inclusive education plays an important role in the social development of learners with barriers.</td>
<td>0.008*</td>
<td>0.717</td>
<td>0.408</td>
<td>0.481</td>
</tr>
<tr>
<td>Statement</td>
<td>Value 1</td>
<td>Value 2</td>
<td>Value 3</td>
<td>Value 4</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Mainstream schools can provide for learners with barriers.</td>
<td>0.67</td>
<td>0.465</td>
<td>0.906</td>
<td>0.571</td>
</tr>
<tr>
<td>The school should supply assistants to help with individual learners with barriers.</td>
<td>0.473</td>
<td>0.491</td>
<td>0.875</td>
<td>0.246</td>
</tr>
<tr>
<td>District – based professional support services are adequate for inclusive education implementation.</td>
<td>0.16</td>
<td>0.256</td>
<td>0.724</td>
<td>0.081</td>
</tr>
<tr>
<td>In this school, effective and constant communication motivates learners and educators.</td>
<td>0.618</td>
<td>0.693</td>
<td>0.97</td>
<td>.018*</td>
</tr>
<tr>
<td>There is a climate of respect, cooperation and trust in our school that motivate our educators.</td>
<td>0.386</td>
<td>0.855</td>
<td>0.942</td>
<td>0.64</td>
</tr>
<tr>
<td>Physical working conditions in our school motivate educators.</td>
<td>0.349</td>
<td>0.627</td>
<td>.016*</td>
<td>0.769</td>
</tr>
<tr>
<td>Large class sizes have detrimental effect on the implementation of inclusive education.</td>
<td>0.995</td>
<td>0.058</td>
<td>0.83</td>
<td>.032*</td>
</tr>
<tr>
<td>Female educators are able to handle learners with barriers better than male educators.</td>
<td>0.465</td>
<td>0.168</td>
<td>0.503</td>
<td>.026*</td>
</tr>
<tr>
<td>Experienced educators are able to implement inclusive education effectively.</td>
<td>0.805</td>
<td>0.795</td>
<td>0.265</td>
<td>0.544</td>
</tr>
<tr>
<td>Inadequate experience of educators may impact negatively in implementing inclusive education.</td>
<td>0.785</td>
<td>0.178</td>
<td>0.642</td>
<td>.044*</td>
</tr>
<tr>
<td>The level of education training plays an important role in implementing inclusive education.</td>
<td>0.566</td>
<td>0.128</td>
<td>0.966</td>
<td>.014*</td>
</tr>
<tr>
<td>Our school manager gives all the educators direction to improve quality.</td>
<td>0.368</td>
<td>0.083</td>
<td>0.78</td>
<td>.024*</td>
</tr>
<tr>
<td>Interventions for inclusive education are rendered</td>
<td>0.675</td>
<td>0.228</td>
<td>0.177</td>
<td>0.45</td>
</tr>
</tbody>
</table>
continuously in this school to improve the quality.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>p-value</th>
<th>q-value</th>
<th>v-value</th>
<th>r-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is evidence of quality leadership in this school for inclusive education.</td>
<td>0.15</td>
<td>0.67</td>
<td>0.062</td>
<td>0.491</td>
</tr>
<tr>
<td>All the stakeholders in our school are being treated with respect and dignity.</td>
<td>0.603</td>
<td>0.862</td>
<td>0.936</td>
<td>0.428</td>
</tr>
<tr>
<td>My school’s policy makes provision for inclusive education.</td>
<td>0.969</td>
<td>0.355</td>
<td>0.93</td>
<td>0.2</td>
</tr>
<tr>
<td>It is a challenge to teach learners with barriers in the mainstream classroom.</td>
<td>0.327</td>
<td>.000*</td>
<td>0.66</td>
<td>0.054</td>
</tr>
<tr>
<td>Everyone can learn in the mainstream classroom, including a learner with barriers.</td>
<td>0.513</td>
<td>0.295</td>
<td>0.468</td>
<td>0.201</td>
</tr>
</tbody>
</table>

4.8.1 Chi-Square test

The following are summaries of the hypothesis tests carried out using the Chi-Square test.

- Hypothesis 1: There is a significant relationship between gender and the statement: learners with barriers to learning should be assessed in order to identify weaknesses.
- Hypothesis 2: There is a significant relationship between experience and the statement: placement tests should be used to place learners with barriers in special classes.
- Hypothesis 3: There is a significant relationship between gender and the statement: the current ethos of my school considers barriers to learning.
- Hypothesis 4: There is a significant relationship between experience and the statement: inclusive education practices demand little financial support.
• Hypothesis 5: There is a significant relationship between experience and the statement: in this school, learners are viewed as most important customers.

• Hypothesis 6: There is a significant relationship between educational qualification and the statement: learners requiring high-intensity support should be accommodated in mainstream schools.

• Hypothesis 7: There is a significant relationship between gender and the statement: inclusive education plays an important role in the social development of learners with barriers.

• Hypothesis 8: There is a significant relationship between experience and the statement: in this school, effective and constant communication motivates learners and educators.

• Hypothesis 9: There is a significant relationship between qualification and the statement: physical working conditions in our school motivate educators.

• Hypothesis 10: There is a significant relationship between qualification and the statement: large class sizes have detrimental effect on the implementation of inclusive education.

• Hypothesis 11: There is a significant relationship between experience and the statement: female educators are able to handle learners with barriers better than male educators.

• Hypothesis 12: There is a significant relationship between experience and the statement: inadequate experience of educators may impact negatively in implementing inclusive education.

• Hypothesis 13: There is a significant relationship between experience and the statement: the level of education training plays an important role in implementing inclusive education.

• Hypothesis 14: There is a significant relationship between experience and the statement: our school manager gives all educators direction to improve quality.
• Hypothesis 15: There is a significant relationship between age and the statement: it is a challenge to teach learners with barriers in the mainstream classroom.

For example, the p-value for “Gender” by “Learners with barriers to learning should be assessed in order to identify weaknesses.” is 0.011. This means that by gender, respondents viewed the above statement differently, that is, there is a significant relationship between gender and “Learners with barriers to learning should be assessed in order to identify weaknesses.” With reference to Table 4.7, Figure 4.1 and Figure 4.2, it can be noted that the hypotheses 1 to 15 can be partially accepted.

4.9 Cross tabulation

An examination of the cross tabulation in Table 4.10 gives an indication of the direction of the relationship between gender and the statement.

<table>
<thead>
<tr>
<th>Learners with barriers to learning should be assessed in order to identify weaknesses.</th>
<th>Gender</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Learners with barriers to learning should be assessed in order to identify weaknesses.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>Count</td>
<td>% of Total</td>
</tr>
<tr>
<td>Agree</td>
<td>Count</td>
<td>% of Total</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>Count</td>
<td>% of Total</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>% of Total</td>
</tr>
</tbody>
</table>
As reflected in Table 4.15, there are more female respondents who agree with the statement than there are male respondents. Hence, gender does play a role when it comes to “Learners with barriers to learning should be assessed in order to identify weaknesses.”

### 4.10 Correlations

Spearman’s rank order correlation was performed to determine the relationships between the ordinal variables by category. The average score was used to represent the common factor statements. Statements with negative covariances were eliminated.

#### Table: 4.11: Correlations

<table>
<thead>
<tr>
<th>Spearman's rho</th>
<th>Knowledge</th>
<th>Attitude</th>
<th>Resources</th>
<th>Experience</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Knowledge</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation Coefficient</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.212*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>104</td>
<td>104</td>
<td>104</td>
<td>104</td>
<td></td>
</tr>
<tr>
<td><strong>Attitude</strong></td>
<td>.31</td>
<td></td>
<td>.438***</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Correlation Coefficient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.053</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td><strong>Support</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation Coefficient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.191</td>
<td>.438***</td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
</tbody>
</table>
The highlighted values represent directly proportional relationships between the categories. This implies that an increase in one leads to a corresponding increase in the other, and vice versa. For example, increased levels of attitude (rho = 0.483) and support (rho = 0.549) result in improved levels of quality.

Most of the values were positive, implying a directly proportional relationship. However, there are some values which were negative. This implies a negative or inverse correlation, whereby an increase in one variable can lead to a decrease in another variable.

### 4.11 Conclusion

The results of the empirical study were presented and analysed in this chapter. The data was analysed by a statistician using statistical methods. A detailed analysis of the results was presented in the form of graphs and tables. The overall reliability score for the variables that constituted the study is high and acceptable (0.792). The demographic age profile of this study indicates that the 46 – 55 age group was the dominant group, with 95.2% of the respondents being female.
Further, the scoring patterns of the respondents for the 30 statements were grouped into five categories, namely, knowledge, attitude, resources, experience and quality. This was followed by analysing the overall concerns of the respondents with respect to implementing inclusive education in a mainstream school. The concerns were linked to the theoretical framework. The hypothesis testing revealed a significant relationship between biographic factors and the fifteen statements. The cross tabulations also indicated significant relationships. Most of the correlations were positive, implying a directly proportional relationship.

The next chapter highlights the significant findings of the study and makes recommendations. The chapter will also include possible future related research studies in this important area at schools.
CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

In the previous chapter, data from the questionnaires was analysed and interpreted using SPSS (Statistical Package for Social Scientists) version 20.0. The focal point of this study was to evaluate the challenges of inclusive education in the foundation phase at selected schools with the objective of providing educators with greater insight into improving the quality of teaching and learning.

This chapter includes the salient aspects contained in the preceding chapters and provides a summary of significant findings of the empirical study. Based upon conclusions drawn from the study, this chapter includes recommendations for the implementation of inclusive education, and finally, some proposals for further research are presented.

5.2 Summary of the theoretical study

A preliminary survey of inclusive education literature highlighted several factors which were instrumental in directing this study. The past two decades have seen the evolution of government policies and structural changes in the provision of inclusive education in South Africa. The changes in the landscape of education in South Africa require management to be responsible and accountable in managing mainstream schools to accommodate inclusive education.

The objective of chapter two was to evaluate, from the literature, the development and implementation of inclusive education in mainstream schools. Chapter two focussed on an overview of inclusive education and policies governing inclusive education. South Africa has embraced inclusive education
to address the challenges faced by learners that experience barriers to learning. Substantial effort is required from various education departments to implement the paradigm shift towards inclusive education. The focus of inclusive education needs to shift from what is wrong with the learner to contextual factors that interfere with learning. Barriers to learning and learning needs could be either permanent, recently acquired, fluctuating or circumstantial. South Africa should move swiftly towards an inclusive paradigm in order to cater for the needs of all learners. Education for learners with barriers at ordinary schools is provided with relevant educational support services. The implementation of inclusive education requires resources and commitment from the school as well as support from the community and government.

The new curriculum in South Africa expects educators to accommodate learner diversity, which places a major responsibility on the shoulders of mainstream educators. The problems identified in the literature will undoubtedly create many challenges for the educator. The ratio between educators and learners is not conducive for effective teaching and learning, especially in inclusive education. It seems that many schools do not have the management skill to implement inclusive education effectively. There is inadequate support staff, which is crucial to facilitate the implementation of inclusive education. It could be surmised that for the successful implementation of inclusive education, drastic measures are necessary to address the challenges and concerns. It is noted that many of the international practices of inclusive education have been incorporated into South African policy and guidelines.

Total quality management (TQM) is a management philosophy that encourages an organisational culture that delivers customer satisfaction through continuous improvement. It is well documented that educational institutions have adapted TQM concept within their institutions. TQM has become a catalyst for change in education. Quality education is only achieved when all learners are given an opportunity to succeed. The quality factor in primary schools will invariably affect the secondary schools and tertiary sector. It is clear that addressing the
challenges of inclusive education is dependent on quality teacher education and training. The educators’ knowledge and understanding of inclusive education is greatly influenced by the quality and quantity of professional development. Successful education depends on empowering, motivating and training educators. Quality management seeks to monitor and support these processes.

5.3 Summary of the empirical study

Chapter four provided the results of the study, gathered from the questionnaires, together with an analysis and interpretation thereof. The research findings are presented in accordance with the main questions of the study. A narrative is presented under the categories of the previous chapter. This study has demonstrated that it is possible to obtain feedback from educators. Educators have shown willingness to provide information, which may be utilised to address some of the challenges of implementing inclusive education in the mainstream school. The reliability and validity of the questionnaire as a measuring instrument to evaluate the challenges of inclusive education were determined with the aid of the coefficient alpha. In this study, the overall reliability score for the variables yielded 0.792, which is high and acceptable.

5.3.1 Biographic characteristics of respondents

The sample was overwhelmingly female respondents (95.2%). The sample also reflects that there are no male educators in the under 35 age category. The demographic age profile of this study indicates that the 46-55 age group was the dominant group. Most of the respondents are mature and experienced educators. Nearly 62% of the respondents had been teaching for more than 11 years, which emphasises the point that the cohort was mainly constituted by experienced educators. Nearly 8 out of every 10 respondents had a diploma or degree qualification as their highest qualification. There is an approximate split of a third of the respondents for each of the grades one, two and three. This
finding indicates that all three grade educators are equally represented in this study.

5.3.2 Category: Knowledge

The purpose of this category was to evaluate the educators’ general understanding of inclusive education, with particular reference to barriers to learning. A majority of the respondents agree that learners with barriers should be accommodated in separate special schools. It is evident from the responses that the general knowledge on inclusive education and barriers to learning are somewhat narrow. Most the respondents had not received any formal training addressing learners’ needs in an inclusive classroom. These educators obtained diplomas and degrees in teacher education prior to 1994, where inclusive education was not policy. The narrow perception, namely, that inclusive education is synonymous with barriers to learning may be an impeding factor in implementing inclusive education in mainstream schools. Lack of skills and competence has been mentioned in studies on inclusive education in South Africa (Engelbrecht, Forlin, Eloff and Swart 2001).

5.3.3 Category: Attitude

The attitude of educators in the foundation phase plays an important part in the successful implementation of inclusive education in the mainstream school. Majority of the respondents view the learner as the most important customers. The results are also indicating that educators are not prepared for inclusive education classroom management. Most of the respondents have a negative attitude towards inclusive education, which can be attributed to lack of skills and the fact that inclusive education is still new in South Africa. Educators with experience in inclusive education hold positive attitudes than those with less experience and the smaller the class size result in positive attitudes of educators (Boer, Pijl and Minnaert 2011:333).
5.3.4 Category: resources

There has to be adequate teaching support to facilitate the implementation of inclusive education. The concerns indicated by respondents include large class sizes, poor professional district support and physical working conditions. It can be inferred that many of the schools are under-resourced and the implementation of inclusive education would be difficult under these conditions, subsequently impacting on the provision of quality education in a mainstream school.

5.3.5 Category: experience

Boer, Pijl and Minnaert (2011:348) indicate that educators with fewer years of teaching were positive toward inclusive education than those with more years of teaching experience. The majority of the respondents indicated that the experience of educators may impact positively in implementing inclusive education. In addition, a majority of the respondents indicated that experienced educators will be effective in implementing inclusive education. The respondents were indifferent to female educators handling inclusive education better than the male counterparts. The attitude of educators can change as a function of experience.

5.3.6 Category: quality

The success of inclusive education is dependent on quality teacher education and training. Education as a component of TQM implies that educational administrators will be responsible for educating staff. Over 80 percent of the respondents agreed that the following are critical factors for implementing inclusive education:

- Level of education;
Treating all stakeholders with respect and dignity; and
School managers giving direction to educators to improve quality.

The integrated quality management system (IQMS) objective is to ensure the quality of public education and to constantly improve the quality of teaching and learning.

5.3.7 Respondents’ suggestions and observations

The open-ended question requesting respondents’ suggestions and observations in respect of inclusive education in their school reveals divergent responses. The respondents expressed concern regarding the following:

- Large class size;
- The need for training for educators;
- That resources were inadequate;
- Language barriers;
- The need for remedial educators;
- The need for staff development; and
- The need for parental involvement.

Respondents feel that it is not possible to meet all the needs of learners in a large class. Educators are expected to complete a specified volume of work within a given time period while simultaneously assisting learners who are experiencing barriers to learning. Educators need support and further training and development. Most workshops on inclusive education are conducted after school hours and lack follow-up sessions to assist educators. This will allow educators to cope with challenges and keep abreast with recent development. Learners find themselves in the mainstream classrooms where they are expected to excel without any additional support. It seems that educators feel inadequate to detect the individual learner’s ‘barriers to learning’ and provide
individual attention to all learners in the classroom. Parental support is paramount in the effective implementation of inclusive education.

5.4 Attainment of study objectives

The overall reliability score for the variables that constitute the study is high and acceptable. In the first chapter, (Section in 1.4) specific objectives for this study were identified. The relevant information was analysed through a literature study in chapter two. In chapter four, the findings of the empirical study were reported. This section explains how the objectives of this study were achieved.

The first objective was to determine the respondents’ perspective of inclusive education in the mainstream school. The findings are adequately reflected in chapter four. A summary of the empirical study has been presented in accordance with the main questions of the study in section 5.3. The comprehensive analysis of the research findings of the empirical study presented in chapter four is sufficient to conclude that the knowledge and attitude of respondents on barriers to learning are moderate. There are specific aspects relating to barriers to learning and inclusive education that need attention, which is the subject of discussion within the recommendations made in this study.

The second objective was to determine factors that influence the quality of teaching and learning in the mainstream school. Section 4.7 includes the concerns of the respondents. The responses are divergent. Many respondents felt that it is not possible to meet all the needs of learners in a large class. Many respondents are of the opinion that they do not possess adequate training, skills time and support to ensure quality for all learners. The challenge of training educators for inclusive education does not lie on “one-shot workshops” (Ainscow 1993:245). This was the conclusion by a study conducted by Bothma (1997:59). Unless educators are prepared and given the support necessary for inclusive education, quality education for all learners will not be achieved
The need for support with further training and development was needed for educators. Learners with barriers to learning cannot excel in the mainstream classroom without additional support. Inclusive education aims to provide quality education for all learners and educators have the primary role in creating a classroom atmosphere that is conducive to teaching and learning.

The third objective was to identify relationships, if any, between perspectives of inclusive education and biographic characteristics of respondents. The Chi square test was performed to determine whether there was a statistically significant relationship between the statements and biographic characteristics. It was found that there is a significant relationship between the following:

- Age of respondent and the statement: it is a challenge to teach learners with barriers in the mainstream classroom;
- Gender of respondent and the statement: learners with barriers to learning should be assessed in order to identify weaknesses;
- Educational qualification of respondent and the statement: learners requiring high-intensity support should be accommodated in mainstream schools; and
- Experience of respondent and the statement: inadequate experience of educators may impact negatively in implementing inclusive education.

With reference to Table 4.7, Figure 4.1 and Figure 4.2, it can be noted that the hypotheses 1 to 15 (Section 4.8.1) can be partially accepted.

5.5 Limitations

The study has provided relevant and interesting insights into the understanding of inclusive education in the mainstream school. It is important to recognise the following limitations associated with this study:
• The study was limited to a population comprising foundation level educators at 14 selected schools in the eThekwini region of KwaZulu-Natal. The results, therefore, cannot be generalised to all mainstream schools in KwaZulu-Natal or South Africa;

• The results of this study may not be representative of the entire population for the very fact that a judgemental sampling method was utilised; and

• This study was focused on foundation level educators. Thus, the perception for the other level educators was not included in this study.

5.6 Recommendations

This section presents recommendations for the various concerns and issues for the effective implementation of inclusive education. They are based on the findings of this study and the literature review.

• A substantial effort is required to implement the paradigm shift towards inclusive education and change the attitude of educators;

• Educators need to be work shopped in greater intensity to prepare them to accommodate learners requiring support in the mainstream school. The support from the Department of Education should be on a continuous basis – not on ad-hoc basis;

• The under-resourced schools and schools from impoverished backgrounds need learning material to accommodate the large numbers. These schools need to be supported financially by the Department of Education and the private sector;

• Teacher education institutions need to embrace inclusive education more fully to produce graduates with the desired knowledge, attitudes and relevant skills;
• Intervention for educators should include strategies to accommodate second language learners and teaching style; and
• Parents from disadvantaged communities must be empowered and motivated to participate actively in the learners' learning programme.

5.7 Scope for future study

The following recommendations are submitted for future research. These recommendations will add to an understanding of the challenges of inclusive education at the foundation phase at mainstream schools on the quality of teaching and learning and will provide the education departments with more insight into addressing the challenges currently associated with inclusive education:

• The study concentrated on foundation level educators in selected schools. Further studies could examine other level educators and other schools or provinces; and
• The study was confined to educators. These are not the only personnel involved. Research needs to be conducted with principals, heads of department and subject advisors.

5.8 Conclusion

South Africa has implemented inclusive education as the means by which learners with learning barriers are educated in a mainstream school. The study was motivated by the belief that every learner must be given equal opportunity to be educated. This study has evaluated the perceptions of foundation level educators' on the implementation of inclusive education. The results revealed that the majority of educators lacked the necessary skills and resources that would ensure effective teaching and learning of learners with learning barriers. This deficiency is impacting negatively on the quality of teaching and learning.
The experience and commitment of educators has allowed educators to use improvised methods to assist learners to cope in the mainstream classroom. Intervention strategies need to be implemented to accommodate second language learners within the mainstream classroom. This aspect poses a challenge to the educator as well as to other learners within the same classroom.

The monitoring learning achievement (MLA) survey by the Department of Education, in 1999, found that the employment of under-qualified teachers in the foundation phase has a negative impact on the quality of teaching and has contributed to poor learner performance (South Africa 2008). Mannen (2006: 641) qualifies this problem in his definition of quality as a degree of excellence. Schools must continually improve the effective use of resources and opportunities to attain excellence in education. Engelbrecht, Oswald, Swart and Eloff (2003:301) attest that educators receive little support in teaching of learners with barriers. Educators felt unprepared and unequipped for working in an inclusive classroom. Green (2009:128) contends that the new curriculum, National Curriculum Framework (NCF) in South Africa, offers the flexibility to make inclusivity a reality. However, making a success of inclusive education requires more than a change of curriculum.

The study has made a theoretical and practical contribution to the challenges that inclusive education has on the quality of teaching and learning in a mainstream classroom. Moreover, it is envisaged that the study has evoked awareness among educators of inclusive education.

Educators are reaching out for help in the form of workshops and training. However, this is seriously lacking and thus has a ripple-effect to all stakeholders in the life of our learners. Although the White Paper on Education and Training (South Africa 2001a) and the White Paper on Special Education (South Africa 2001b) are the vehicles that steered inclusive education into the system twelve
years ago, educators still seem unprepared which is questionable if the quality is to be improved.

In this study, an understanding of the issues involved in inclusive education in the past two decades and the evolution of government policies in the provision of inclusive education in South Africa were highlighted. The study points to the need for training programmes for educators and resources for impoverished schools for the successful implementation of inclusive education.
REFERENCE LIST


Gyimah, E. K. and Vanderpuye, I. 2006. *Inclusive Education in Ghana: What are the levers for change?* Department of Educational Foundations, University of Cape Coast, Cape Coast. Promoting learner development.


Zulu, S. P. 2009. Primary school educators’ attitudes towards inclusive education. MA, University of Zululand.
APPENDIX 1

QUESTIONNAIRE / COVER LETTER

Dear Educator

23 June 2012

QUESTIONNAIRE

I am currently conducting a research study as part of my Master’s degree in Quality Management at the Durban University of Technology. The purpose of the study is to evaluate the challenges of inclusive education at the foundation phase on the quality of teaching and learning.

Inclusive education means to integrate learners with special needs into mainstream schools. For the purpose of this study, inclusion refers to learners who experience barriers to learning. It does not refer to learners with disabilities or special needs in classrooms with learners who do not have such disabilities or needs.

I would appreciate your co-operation in taking the time to complete this questionnaire as honestly as possible. The purpose of this study is for academic purposes and all respondents will remain anonymous. All information will be treated as strictly confidential.

I thank you for your kind co-operation and valuable input.

Yours faithfully

T Penceliah
Masters student
Cell: 0824472246

Professor K Reddy (Supervisor)  Professor N Dorasamy (Co-Supervisor)
Tel: 031 373 5671  Tel: 031 373 6862
APPENDIX 2
SECTION A: EDUCATORS PERCEPTIONS

The different statements reflect about inclusive education and the quality of teaching and learning in the foundation phase. Tick the response, which most closely represents your perception towards each statement. The rating guide is as follows:

<table>
<thead>
<tr>
<th>RATINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>UNCERTAIN</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Learners with barriers in learning should be accommodated in separate special schools.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2 Inclusive education works well in countries where it has been implemented.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3 Learners with barriers to learning should be assessed in order to identify weaknesses.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4 Placement tests should be used to place learners with barriers in special classes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5 The current ethos of my school considers barriers to learning.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6 Inclusive education addresses the challenges faced by learners that experience “barriers to learning”.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7 Inclusive education practices demand little financial support from the schools resources.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8 In this school, learners are viewed as most important customers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9 Educators are prepared for inclusive education classroom management.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Statement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>10</td>
<td>Learners requiring high – intensity support should be accommodated in mainstream schools.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>I am comfortable to teach learners with barriers in the mainstream class.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12</td>
<td>Inclusive education plays an important role in the social development of learners with barriers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13</td>
<td>Mainstream schools can provide for learners with barriers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14</td>
<td>The school should supply assistants to help with individual learners with barriers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15</td>
<td>District – based professional support services are adequate for inclusive education implementation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16</td>
<td>In this school, effective and constant communication motivates learners and educators.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17</td>
<td>There is a climate of respect, co-operation and trust in our school that motivate our educators.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18</td>
<td>Physical working conditions in our school motivate educators.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>19</td>
<td>Large class sizes have a detrimental effect on the implementation of inclusive education.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20</td>
<td>Female educators are able to handle learners with barriers better than male educators.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>21</td>
<td>Experienced educators are able to implement inclusive education effectively.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>22</td>
<td>Inadequate experience of educators may impact negatively in implementing inclusive education.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>23</td>
<td>The level of education training plays an important role in implementing inclusive education.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Our school manager gives all the educators direction to improve quality.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Interventions for inclusive education are rendered continuously in this school to improve the quality.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>There is evidence of quality leadership in this school for inclusive education.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>All the stakeholders in our school are being treated with respect and dignity.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>My school’s policy makes provision for inclusive education.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>It is a challenge to teach learners with barriers in the mainstream classroom.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Everyone can learn in the mainstream classroom, including a learner with barriers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SECTION B: GENERAL BIOGRAPHICAL INFORMATION**

Please **tick only ONE box** for each question.

31. Please indicate your gender

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
</tr>
</tbody>
</table>

32. Please indicate your age

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>18 – 25 years</td>
<td></td>
</tr>
<tr>
<td>26 – 35 years</td>
<td></td>
</tr>
<tr>
<td>36 – 45 years</td>
<td></td>
</tr>
<tr>
<td>46 – 55 years</td>
<td></td>
</tr>
<tr>
<td>56 years and over</td>
<td></td>
</tr>
</tbody>
</table>

33. Please indicate your highest educational qualification
34. Please indicate your experience in the foundation phase

<table>
<thead>
<tr>
<th>1 to 3 years</th>
<th>4 to 6 years</th>
<th>7 to 10 years</th>
<th>11 to 20 years</th>
<th>Over 20 years</th>
</tr>
</thead>
</table>

35. Level of grade being taught

<table>
<thead>
<tr>
<th>Grade one</th>
<th>Grade two</th>
<th>Grade three</th>
</tr>
</thead>
</table>

36. Suggestions/Observations (in order of priority) in respect of inclusive education in your “school”. Identify challenges/reasons why learners with learning barriers should or should not be accommodated in mainstream schools.

(a) _____________________________________________________________________________
__________________________________________________________________________________
(b) _____________________________________________________________________________
__________________________________________________________________________________
(c) _____________________________________________________________________________
__________________________________________________________________________________

THANK YOU FOR YOUR CO-OPERATION.
APPENDIX 3

Application for Permission to Conduct Research in Kwa-Zulu Natal Department of Education Institutions

1. Applicants Details

Title: Mrs. Surname: Penceliah
Name Of Applicant: Thamindri Email: pencelid@dut.ac.za
Tel No: 031 822 5425 Fax: 0866 741 047 Cell: 082 4472 246

Postal Address: PO Box 40 293
                                   REDHILL
                                             KwaZulu-Natal 4071

2. Proposed Research Title: The impact of Inclusive Education on the quality of teaching and learning in the foundation phase: An educator’s perspective

3. Have you applied for permission to conduct this research or any other research within the KZNDoE institutions? Yes No X
4. Is the proposed research part of a tertiary qualification?

   If “yes”

   **Name of tertiary institution:** Durban University of Technology

   **Faculty and or School:** Management Sciences/Department of Operations and Quality Management

   **Qualification:** Master of Technology

   **Name of Supervisors:** Professors K Reddy/N Dorasamy

   **Supervisors Signature**

   If “no”, state purpose of research: N/A

5. Briefly state the Research Background

   Since 1994, the education system has been continually changing, resulting in challenges. A number of policy documents have been published which provide scope for transformation and restructuring in education. The policy on inclusive education has resulted in major challenges in the classroom. The inclusive education policy document states that learners who experience barriers to learning should be taught in the inclusive education settings (Republic of South Africa: 2001).

   The educational and social changes faced by schools today have resulted in making schools acutely aware of the need to operate effectively and productively. The emphasis should be in providing learners with quality
education. Inclusive education presents many exciting opportunities as well as challenges for education in South Africa. The urgent need to upgrade the entire general education system provides opportunities for a major transformation of the mainstream education system to become inclusive (Lomofsky and Lazarus, 2001:306). This study sets out to establish an educator perspective of inclusive education on the quality of teaching and learning in the foundation phase, within a mainstream school.

6. What is the main research question(s): The purpose of the study is to evaluate the challenges of inclusive education at the foundation phase at selected mainstream schools on the quality of teaching and learning. The research questions will:

- Investigate suitable quality principles applicable to the foundation phase education;
- Highlight the educators’ perspective of inclusive education and the mainstream school;
- Identify gaps, if any, between inclusive education and mainstream education; and
- Establish the interventions that may enhance the quality of teaching and learning.

7. Methodology including sampling procedures and the people to be included in the sample:
This exploratory, cross sectional research study will evaluate the challenges of inclusive education on the quality of teaching and learning in the foundation phase. Data will be collected through the use of a questionnaire which will be administered to foundation level educators in selected schools in the greater Durban area. In this study a census of the selected schools will be used. The questionnaire will be pre-tested with professionals in the field to validate the research instrument. A covering letter will be included to ensure that the respondents are informed of the nature and purpose of the study. Research questions will be structured in simplest terms, to facilitate easy comprehension by respondents.

8. What contribution will the proposed study make to the education, health, safety, welfare of the learners and to the education system as a whole?
There is a need for better understanding of the challenges of inclusive within a mainstream school on the quality of teaching and learning. New teaching methods and a greater awareness of learning barriers that will reach a larger number of learners will be established. The results of this study could be used as a
benchmark to implement new and effective teaching methods that will assist learners to solve problems in different ways. While research has been conducted on general aspects of school, it appears that no significant study has been conducted to address the challenges that inclusive education has on the quality of teaching and learning in a mainstream classroom. It is hoped that the research will evoke awareness among educators about the quality of teaching and learning in an inclusive education environment. In addition, the findings will be of interest and assistance to other educators, in assessing their quality of teaching and learning in the foundation phase.

### KZN Department of Education Schools or Institutions from which sample will be drawn – If the list is long please attach at the end of the form

<table>
<thead>
<tr>
<th>A sample will be drawn from schools in the Durban Central-Chatsworth and Pinetown Districts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The following schools have been identified:</td>
</tr>
<tr>
<td>Allingham Primary School</td>
</tr>
<tr>
<td>Avoca Primary School</td>
</tr>
<tr>
<td>Columbia Primary School</td>
</tr>
<tr>
<td>Corovoca Primary School</td>
</tr>
<tr>
<td>Duffs Road Primary School</td>
</tr>
<tr>
<td>Effingham Heights Primary School</td>
</tr>
<tr>
<td>Greenbury Primary School</td>
</tr>
<tr>
<td>Greenwood Park Primary School</td>
</tr>
<tr>
<td>Highstone Primary School</td>
</tr>
<tr>
<td>Kenville Primary School</td>
</tr>
<tr>
<td>Phoenix Heights Primary School</td>
</tr>
<tr>
<td>Skylark Primary School</td>
</tr>
</tbody>
</table>

9. **Research data collection instruments:** *(Note: a list and only a brief description is required here - the actual*
Data will be collected through the use of a pre-tested questionnaire. A draft questionnaire is attached.

**10. Procedure for obtaining consent of participants and where appropriate parents or guardians:**
Consent to participate in the research study will be given to each respondent before completion of questionnaire.

**11. Procedure to maintain confidentiality (if applicable):**
Confidentiality and anonymity of records identifying respondents will be maintained by the University. Respondents will not be required to identify themselves.

**12. Questions or issues with the potential to be intrusive, upsetting or incriminating to participants (if applicable):**
Not applicable

**13. Additional support available to participants in the event of disturbance resulting from intrusive questions or issues (if applicable):**
Not applicable, as participation is voluntary and respondents may refuse to participate or withdraw from the study at any time.

**14. Research Timelines:**
The field work for the research study is projected for the period August and September 2012.
15. Declaration

I hereby agree to comply with the relevant ethical conduct to ensure that participants’ privacy and the confidentiality of records and other critical information.

I __________________________________________________declare that the above information is true and correct

__________________________________________________________

Signature of Applicant  Date

16. Agreement to provide and to grant the KwaZulu Natal Department of Education the right to publish a summary of the report.

I/We agree to provide the KwaZulu Natal Department of Education with a copy of any report or dissertation written on the basis of information gained through the research activities described in this application.

I/We grant the KwaZulu Natal Department of Education the right to publish an edited summary of this report or dissertation using the print or electronic media.

__________________________________________________________

Signature of Applicant(s)  Date

Return a completed form to:

Sibusiso Alwar

The Research Unit; Resource Planning; KwaZulu Natal Department of Education
Hand Delivered:
Office G25; 188 Pietermaritz Street; Pietermaritzburg; 3201

Or

Ordinary Mail
Private Bag X9137; Pietermaritzburg; 3200

Or

Email

sibusiso.alwar@kzndoe.gov.za