TEACHING THE INTELLECTUALLY IMPAIRED: CHALLENGES EXPERIENCED BY NON-SPECIALIST EDUCATORS IN PIETERMARITZBURG SPECIAL SCHOOLS

GLADYS NOKWAZI NYAMEKA NTOMBELA

Thesis submitted in partial fulfilment of the academic requirements for the Degree of Masters in Education (Educational Psychology)

Supervisor: Dr. Rosemary Kalenga
Co-Supervisor: Dr Sthabile Ntombela

2012
Declaration

I, Gladys Nokwazi Nyameka, declare that:

I. This thesis represents my original research.

II. This thesis does not contain any other persons writing unless specifically indicated as source for references where quotations have been acknowledged.

(a) Their words have been re-written but the general information contributed by them has been referenced.

III. This thesis has not been submitted for any degree or examination at any other university or college.

IV. This thesis does not contain any graphs, pictures or text pasted from the internet unless specifically acknowledged.

Signature…………………………………………

Date…………………………………………

I declare that this work was supervised by me and I fully support it's submission for examination.

Supervisor’s signature…………………………

Date…………………………………………

Dedication

I dedicate this thesis to my daughter, Vuyiswa, who sacrificed all her time and enjoyment taking care of family responsibilities day and night, my daughter, Fezeka, who was always encouraging me to try my best assisting wherever she could, my granddaughter, Nozuko Zimu, who used to sit next to me throughout the night colouring her books, my school, special needs learners, to all my lecturers in the discipline of Educational Psychology and the Department of Education which encouraged me to conduct this study because of the challenges encountered in special schools.

To all special needs educators who are teaching the intellectually impaired in all KwaZulu-Natal special schools for the love, dedication, passion, the good work they do giving high level of support to special needs learners.

The great and the good work you do caring for the special needs learners is greatly appreciated and noticeable by the Almighty.
Acknowledgement

I would like to pass my sincere thanks and appreciation to the following people who assisted me during my study at the University of KwaZulu Natal, School of Education:

- Dr. Nyna Amin, who was always encouraging, giving me advices and assistance during my first year of research;
- Dr. Rosemary Kalenga, my honourable and caring supervisor, who was always there without hesitation whenever I needed her guidance and support doing my research. I have picked up certain things from you; dedication, passion, sacrifice, love of your work and the love you showed to me as your student;
- To my lecturer Dr S. Ntombela who gave me support during my last hard and tough times;
- To my principal who always encourage her staff to further their studies in order to be well developed academically and be skilful;
- To all UKZN library staff at Edgewood (Anita Kromberg and William Dansoh) and Pietermaritzburg (Sonto Moleme, Goitsemang Ncongwane, John Timms and Nompumelelo Khanyile )for their effort giving me assistance;
- To all educators who volunteered to participate in this research without any hesitation. Without them I would not have gone thus far and;
- To my colleagues: Thembi Nesemari, Thembeka Khumalo, Nomusa Sithole, Phayo Hlophe, Mvuseni Msomi, Bheki Madlala, Busi Sithole , Sbongile Mbense, Mrs Gonum Moodley (FETCollge) and all the other staff members for their support.
List of tables

Table 3.1 : Piaget's four stages of development
Table 5.1 : Findings- Themes and Sub-themes
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNE</td>
<td>Special needs Education</td>
</tr>
<tr>
<td>NCSNET</td>
<td>Natural Commission Special Needs in Education and Training</td>
</tr>
<tr>
<td>NCESS</td>
<td>National committee for education support services</td>
</tr>
<tr>
<td>ZPP</td>
<td>Zone of proximal development</td>
</tr>
<tr>
<td>MKO</td>
<td>More knowledgeable others</td>
</tr>
<tr>
<td>EWP6</td>
<td>Education white paper 6</td>
</tr>
<tr>
<td>IQ</td>
<td>Intelligence quotient</td>
</tr>
<tr>
<td>ADHD</td>
<td>Attention deficit hyperactive disorder</td>
</tr>
<tr>
<td>SMH</td>
<td>Severely mentally handicapped learners with special needs</td>
</tr>
<tr>
<td>LSEN</td>
<td>Learners with special educational needs</td>
</tr>
<tr>
<td>IEP</td>
<td>Individualized education program</td>
</tr>
<tr>
<td>IDEA</td>
<td>Individuals with Disabilities Education Act.</td>
</tr>
<tr>
<td>CA</td>
<td>Chronological Age</td>
</tr>
<tr>
<td>MA</td>
<td>Mental Age</td>
</tr>
<tr>
<td>N</td>
<td>Number</td>
</tr>
<tr>
<td>HOD</td>
<td>Head of department</td>
</tr>
<tr>
<td>OBE</td>
<td>Outcome based education</td>
</tr>
<tr>
<td>NCS</td>
<td>National curriculum statement</td>
</tr>
<tr>
<td>MOESD</td>
<td>Ministry of education and skills development</td>
</tr>
</tbody>
</table>
Abstract

This study was undertaken to explore the challenges experienced by non-specialist educators teaching in special schools for the intellectually impaired learners in one of Pietermaritzburg special schools. The theoretical and conceptual framework is underpinned by two theories, Jean Piaget’s cognitive development theory and Vygotsky’s theory of social constructivism.

A qualitative research design was chosen with a descriptive, contextual and explorative research focus, giving a true reflection of the participants’ situation. Purposive sampling was used to select participants, a homogenous group of non-specialist educators. A case study method was used. Data was collected through semi-structured interviews and observations using pre-designed interview and observation schedules.

The main findings of the study were that the following factors contributed to the challenges experienced by non-specialist educators teaching the intellectually impaired learners and are fully discussed within chapter five that are:

- Curriculum;
- Different levels of intellectual ability and;
- Lack of specialized training.

The study concludes that non-specialist educators need specialized training. In addition, more support is necessary in the form of class assistants and bursaries to support further study. Without adequate and relevant staff development programs, the quality of teaching and learning in such schools will continue to be compromised.
# Table of Contents

Declaration ................................................................................................................................... i
Dedication ................................................................................................................................... ii
Acknowledgement ...................................................................................................................... iii
List of tables ............................................................................................................................... iv
Abbreviations and Acronyms ....................................................................................................... v
Abstract...................................................................................................................................... vi

## CHAPTER 1 .............................................................................................................................. 1
1.1 Introduction .......................................................................................................................... 1
1.2 Focus of the study ................................................................................................................ 1
1.3 Research question/s ............................................................................................................ 2
1.4 Aim of the study ................................................................................................................... 2
1.5 Rationale for the study ........................................................................................................ 2
1.6 Literature Review ................................................................................................................. 2
1.7 Theoretical Framework ......................................................................................................... 4
1.8 Conceptual framework of the study ...................................................................................... 5
1.9 Research Design and Methodology ..................................................................................... 6
  1.9.1 Research Design ........................................................................................................... 6
  1.9.2 Qualitative research ....................................................................................................... 6
  1.9.3 Interpretivist approach ................................................................................................. 7
1.10 Research Methodology ...................................................................................................... 7
  1.10.1 Case Study .................................................................................................................. 7
  1.10.2 Sampling ..................................................................................................................... 8
  1.10.3 Data Collection Methods ........................................................................................... 8
1.11 Ethical considerations ........................................................................................................ 9
  1.11.1 Consent ......................................................................................................................10
  1.11.2 Confidentiality ..........................................................................................................10
  1.11.3 Anonymity and Privacy ............................................................................................11
1.12 Conclusion .....................................................................................................................11
CHAPTER 2 LITERATURE REVIEW

2.1 INTRODUCTION

2.2 Non-specialist educator’s challenges experienced in teaching in special schools for the intellectually impaired learners

2.3 Intellectual functioning of the intellectually impaired learners

2.3.1 Different levels of intellectual ability

2.3.2 Classification of mental retardation

2.4 Classroom strategies

2.4.1 Discipline is more complicated

2.4.2 Stigma is attached to special education

2.4.3 The impact on teachers

2.4.4 Creating collaborative efforts with parents

2.4.5 The impact of the curriculum

2.4.6 Special education is different from mainstream education

2.5 Conclusion

CHAPTER 3 Conceptual and Theoretical Framework

3.1 Introduction

3.2 Conceptual Framework

3.2.1 Special schools

3.2.2 The concept special schools on the International Level

3.2.3 Special school on the National Level

3.3 Special Educational Needs (SEN)

3.3.1 Special Educational Needs in South Africa

3.3.2 The intellectually impaired

3.4 Theoretical Framework

3.4.1 Cognitive Constructivism (Jean Piaget)

3.4.1.1 Assimilation and Accommodation

3.5 Social constructivism

3.5.1 Zone of Proximal Development (ZPD)

3.5.2 Social Interaction and Cooperative Learning

3.5.3 Tools and Practices for the Constructivist Teacher

3.6 Conclusion

Chapter 4 Research Design and Methodology
4.1 Introduction ..........................................................43
4.2 Research Design ......................................................43
  4.2.1 Naturalistic ..........................................................44
  4.2.2 Descriptive ..........................................................44
  4.2.3 Contextual ............................................................45
  4.2.4 Focused on meaning and explanation .........................45
4.3 Qualitative Research Method ........................................45
4.4 Research Methodology .............................................46
4.5 Interpretive Paradigm ...............................................47
  4.5.1 Case study ..........................................................48
  4.5.2 Sampling ............................................................49
4.6 Data collection methods .............................................50
  4.6.1 Interviews ..........................................................51
  4.6.2 Semi-structured interviews ......................................52
    4.6.2.1 Procedure ......................................................52
    4.6.2.2 Face-to-Face/Individual Interviews ......................54
    4.6.2.3 Focus group interviews ......................................54
  4.6.2.3 Focus Group Interview ........................................54
    4.6.2.4 Observations ....................................................56
4.7 Ethical considerations .................................................57
  4.7.1 Permission to gain access to participants and the site .......57
4.8 Conclusion: .........................................................58

CHAPTER 5 Data Analysis and Interpretation of findings ..........59
5.1 Introduction ..........................................................59
5.2 Data Analysis ..........................................................59
  5.2.1 Data Reduction ......................................................61
  5.2.2 Coding ..............................................................61
5.3 Classroom Observations .............................................63
  5.3.1 Prevocational Class ...............................................63
  5.3.2 Senior Educable Class ..........................................64
  5.3.3 Junior Group .......................................................65
5.4 Content Analysis .....................................................66
5.4.1 Concept Mapping: .................................................................66

5.5 Findings: Challenges Experienced and Reasons ........................................66

5.5.1 Challenges experienced by non-specialist educators.................................67
  5.5.1.1 Ever-changing Mainstream Curriculum .................................................67
  5.5.1.2 Curriculum Adaptation ............................................................................68
  5.5.1.3 Designing Down the curriculum .................................................................69
  5.5.1.4 Differentiation of the learners’ intellectual abilities ...................................70
  5.5.1.5 Teaching Methods, lack of skills and knowledge: ....................................71
  5.5.1.6 Mental Age vs. Chronological Age: ..........................................................72
  5.5.1.7 Multiple Disabilities: ................................................................................72

5.5.2 How can these challenges be addressed ......................................................73
  5.5.2.1 Workshops and In-service Training: ..........................................................73
  5.5.2.2 Specialists: .................................................................................................74
  5.5.2.3 Exposure: ....................................................................................................74
  5.5.2.4 Bursaries ....................................................................................................75
  5.5.2.5 Support: ......................................................................................................76
  5.5.2.6 Stigma to special needs educators: ...............................................................76

5.6 Validity and Reliability ......................................................................................77

5.7 Limitations of the study .....................................................................................78

5.8 Literature Control ...............................................................................................78

5.9 Conclusion .........................................................................................................79

CHAPTER 6 Recommendations and Conclusions .................................................80

6.1 Introduction ........................................................................................................80

6.2 Recommendations ..............................................................................................80
  6.2.1 Specialized training facilities .........................................................................80
  6.2.2 Department of Education to provide bursaries for non-specialist educators in-service training .................................................................81
  6.2.3 Active support from the Department of Education ........................................81
  6.2.4 Special Education teachers .............................................................................82
  6.2.5 Teamwork and parental involvement ..............................................................82
  6.2.6 Appointment of class assistants ....................................................................82
  6.2.7 Provision of relevant curriculum by curriculum designers ..............................83
  6.2.8 Physical and material resources Resources .....................................................83
6.2.9 Further Research to be conducted in special schools ...................................................84
6.3 Conclusion ..........................................................................................................................84
References ..............................................................................................................................85
Appendix A ............................................................................................................................90
Appendix B ............................................................................................................................92
Appendix C ............................................................................................................................93
Appendix D ............................................................................................................................94
Appendix E ............................................................................................................................95
Appendix F ............................................................................................................................96
CHAPTER 1

1.1 Introduction

The fact that the South African education system promises the public that it will offer the public special schools with specialized educators to provide quality education does not always translate into reality. This state of affairs is the context within which this chapter gives an overview of the study. It offers a detailed description of the focus of this study and the research questions. The section further discusses the rationale for the study and gives full description of why it needs to be conducted. The chapter also provides a brief review of literature, theoretical and conceptual frameworks to be used, research design and methodology, all of which are elaborated upon later on in the thesis. The chapter concludes with a brief description of ethical considerations that received attention in this study.

1.2 Focus of the study

The main focus of the study is to explore non-specialist educator’s challenges in teaching the intellectually impaired learners. Thus, the focus is on special schools where there are learners with ‘special educational needs’ and this is different from mainstream education. This is the education required by the intellectually impaired learners as they experience major challenges to effective learning. The intellectually impaired learners who fall under the category of being special, meaning different from mainstream learners, and non-specialist educators, that is, educators redeployed from mainstream schools, remain the biggest challenges experienced in special schools teaching the intellectually impaired learners.

The concern for this study is that non-specialist educators are confronted with the challenges of teaching these learners. This is the challenge because teaching skills required to meet the needs of these students are completely different from the ones in the mainstream. Special needs exist where learners require special help and support if they are to overcome the particular contextual, social and individual disadvantages they face (Williams, 2003 citing Donald, Lazarus & Lolwana, 1997:15). Non-specialist
educators teaching the intellectually impaired learners need to equip themselves with skills in order to transmit knowledge during teaching and learning as an educator gives social and moral assistance to a learner.

To provide guidance to the study and its focus, the study's objectives and research questions are discussed below.

1.3 Research objectives and questions

The study sought to establish what challenges are experienced by non-specialist educators in teaching intellectually impaired learners in special schools as well as how these challenges could be addressed. As such, the questions it sought to answer were:

- What are the challenges experienced by non-specialist educators in teaching the intellectually impaired learners in special schools?
- How can these challenges be addressed?

1.4 Aim of the study

The aim of the study is to explore the challenges experienced by non-specialist educators teaching in special schools for the intellectually impaired learners. This in line with the research questions and includes engaging with the reasons they experience them the way they do. This aim, moreover, also influences the rationale for conducting this study.

1.5 Rationale for the study

In the Education White Paper 6 (2001, p3) entitled 'Special Needs Education', the minister of education promised the following: "In this White Paper, we make it clear that special schools will be strengthened rather than abolished...". This became an important motivation for this study, particularly because I am currently an educator in one of the special schools for the intellectually impaired in Pietermaritzburg. I was employed in 2004 with no experience or knowledge of Special Educational Needs.
Initial engagement with the subject indicates that most researchers focus on inclusive education in mainstream schools. This indicates a gap in terms of scholarship in the area. There has been insufficient and a lack of investigation on how educators redeployed from the mainstream schools manage to teach at inclusive special schools. Researchers have assumptions that special schools only employ specialist educators (Steenkamp & Steenkamp 1992). I noticed that most educators in this school were redeployed from mainstream schools due to lack of specialist educators and a shortage of educators in special schools. We experienced major challenges of not having relevant specialization. Lack of teaching skills inhibited effective and competent teaching and learning (COLT) of intellectually impaired learners.

Relating to my teaching experience at a special school, non-specialist educators are educators that were employed in mainstream or normal schools and were redeployed to special schools. Throughout their training and teaching profession, they were exposed to mainstream education as part of their teaching. Due to a decrease in the number of students in regular schools and an increase of special needs learners accommodated in special schools, educators are redeployed to special schools. The training of these educators was different as they were only trained to teach normal or regular students without specialized education in the field of special education needs. Teaching methods learnt during their training were completely different from teaching special needs learners. Some of the reasons might be that educators were not ready and unprepared for such a transmission. Williams (2003) argues that the skills and expertise needed for special needs teaching are clearly different from teaching skills required for mainstream learners.

1.6 Literature Review

Literature review was conducted on internet using different websites, such as Ebscohost, Google Scholar, Sabinet and other resources. What emerges out of most sources is that the challenges of teaching the intellectually impaired learners in special schools provide an important starting point in reviewing literature on how these challenges are experienced by non-specialist educators in special schools. In this study, literature review is based on the exploration of challenges experienced by non-specialist
educators who were redeployed from mainstream schools to special schools. Literature from other researchers in other countries will also be reviewed. Such literature indicates the challenges experienced by non-specialist educators teaching in special schools for the intellectually impaired learners. Jobling and Moni (2004) argue that there can be no doubt that today's classrooms have to accommodate students with a range of diverse needs and learning difficulties, whether teachers have any skills in the area or not. Furthermore, trained teachers feel stressed and insecure about catering for students with special needs in the regular classroom.

Ntombela (2006) states that South African Schools Act attempted to promote interaction and to reduce the distance between regular and special education, but to date there has been very little collaboration or interaction between them. She further states that, as highlighted in the report by NCSNET and NCESS, this Act, in its conceptualization of "special needs", shows no significant shift from the historical deficit understanding (citing the Department of Education, 1997). The theoretical and conceptual framework underpinning this study will be discussed further in later chapters.

1.7 Theoretical Framework

The challenges experienced by learners in special schools emanate from the problems of non-specialist educators styles and methods of teaching that affect teaching and learning. Williams (2003) argues that the reason for this is that most of the teachers redeployed were never trained to deal with the curriculum for the mentally handicapped children.

Within the field of educational psychology the researcher, aligning with the work of Piaget's cognitive development theory and Vygotsky's theory of social constructivism, found a distinct relationship in these theories as they work together as a system within the child's development. Engelbrecht and Green (2005) state that Piaget and Vygotsky used information-processing model which provides valuable insight towards a better understanding of the learning process. Vygotsky's theory, as a foundation of constructivism, asserts three themes that are relevant to this study: Zone of Proximal Development (ZPD), More Knowledgeable Other (MKO) and Social interaction. These
theories are found to be relevant to the focus of this study in the sense that those non-specialist educators’ experience challenges that affect the intellectual development of the intellectually impaired learners, and these are cognitive in nature. According to Powell (2009), cognitive or individual constructivism draws from Piaget's theory, and social constructivism from Vygotsky's. Collaboration between non-specialist educators as they are transmitters of knowledge and the intellectually impaired learners as assimilators and accommodators is therefore needed.

1.8 Conceptual framework of the study

The concepts relevant to this study focus on challenges experienced by non-specialist educators will be briefly clarified. At this juncture it suffices to list them:

- Special schools (Mayaba, 2008) refers to a school that is equipped to deliver education to learners requiring high-intensive educational and other support either on a full-time or part-time basis (DoE, 2005d);

- Non-specialist educators are referred to as participants in this study are educators who teach and educate learners with special educational needs in special schools without having specialized education;

- Mentally handicapped child as a child whose intellectual functioning is significantly below average and whose level of development lags behind in comparison with children of the same chronological age (Olivier and Williams 2005).

- Impairment is the functional limitation within the individual caused by physical, mental or sensory impairment (Mckenzie, 2009 cited Olivier 1996);

- Disability is the loss or limitation of opportunities to take part in the normal life of the community on an equal level with others due to physical and social barriers (Mckenzie, 2009 cited Olivier, 1996) and;
Special Needs Education is the education of students with special needs in a way that it addresses the students' individual differences and needs.

1.9 Research Design and Methodology

1.9.1 Research Design

This study will adopt the qualitative research design. Qualitative research will be chosen with a descriptive, contextual and explorative research design. This design is ideal for the study as the researcher will collect valid, reliable and rich data from the participants' experiences through verbal communication (individual and group interviews) which is in the form of words. Case study is the purpose of such interviews to probe deeply and to analyze intensively the multifarious phenomena that constitute the life cycle of a unit (Cohen, Manion and Morrison, 2000:185). A case study will be used in this study to engage in an in-depth enquiry into how non-specialist educators’ challenges are experienced in a Pietermaritzburg special school. The case in this study is non-specialist educators in one of the special schools in Pietermaritzburg.

1.9.2 Qualitative research

Qualitative research design underpinning this study will involve the exploration and description of the major challenges experienced by non-specialist educators teaching the intellectually impaired learners. According to Mertens (2010), qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their own natural settings with an intention to make sense of, or to interpret, a phenomena in terms of the meanings people bring to them. Researchers are only interested in meaning, that is, how people make sense of their lived experiences and other structures of the world. As a researcher, qualitative research will be conducted to gather rich data from the participants in their natural setting, a selected special school in this study. Qualitative research will give a true reflection of the participants' situation. Data collected will give meaning in the sense that participants’ interview questions will be based on the challenges experienced by non-specialists in their working environment. These experiences will be their lived experiences. Qualitative Data collected will be verbal data in the form of words which
will be interpreted. As this study focuses on collecting textual and verbal data, *interpretivist approach/paradigm* was used.

### 1.9.3 Interpretivist approach

Cohen, Manion and Morrison (2011:3) discuss three paradigms, the positivist, interpretivist and critical paradigm. According to Mackenzie and Knipe (2006) interpretivist paradigm grew out of philosophy of Edmund Husserl’s phenomenology, and Wilhelm Dilthey’s and other German philosophers’ (Mertens, 2005:12). (Mackenzie and Knipe (2006) argue that the Interpretivist researchers tend to rely upon the “participants’ views of the situation being studied “and recognize the impact on the research of their own background and experiences (Creswell, 2003:8). These personal experiences generate valid and reliable data based on sound knowledge of the phenomenon. This paradigm intends to understand the world of human experience as these experiences are socially and experientially based. Given the nature of my study and its focus on how non-specialist educators view and make sense of their reality as reality is socially constructed, this study will be underpinned by the interpretivist paradigm. Cohen et.al. (2011:19) state that the central endeavor of the interpretive paradigm is to understand the subjective world of human experiences. To retain the integrity of the phenomenon being investigated, efforts are made to get inside the person and to understand it from within.

### 1.10 Research Methodology

Research methodology that will be used is the case study. This methodology allows participants to be given an opportunity to provide in-depth information of their lived experiences. Cohen, Manion and Morrison (2000) state that case study is the purpose of such interviews to probe deeply and to analyze intensively the multifarious phenomenon.

#### 1.10.1 Case Study

The researcher aims to capture the reality of the participants’ lived experiences of and thoughts about, a particular situation. Furthermore, a case study is an in-depth study of one particular case, where the case may be a person, a group of people, a school, a community, or an organization (Cohen, et.al .2000:182). The researcher will employ a
case study research on non-specialist educators who are a group of people teaching in the special school context. Litchman (2011) views case studies research as a form of qualitative research focused on interpreting a particular phenomenon. Furthermore, case studies typically consist of varying emphasis on data collection through observations, interviews and documents. In order to conduct case studies, purposive sampling will be done to the homogeneous group of non-specialist educators.

1.10.2 Sampling
Meterns (2010) supports the view that researchers within the constructivist paradigm tend to use purposive approach to sampling. In this study, the sample was selected from the population of non-specialist educators in the same special school, and this is called convenience or purposive sampling. Non-specialist educators from one of the Pietermaritzburg special schools participated in this research study. Participants in this study included two educators from the junior group, two from the middle group and one from the senior group. The total years of experience in teaching ranged from one (N=1) to fifteen (N=15) years. According to McMillan and Schumacher (2006), researchers obtain data primarily to become oriented and to gain a sense of the totality for the purposeful sampling. Purposive sampling was used in order to access valid, reliable and rich information from the homogeneous group of non-specialist educators. An advantage of this sampling is that it is easy to reach participants, costs less, and participants are privileged witnesses to the research. This information will be based on their first hand experiences and their ability to contribute during the research process.

1.10.3 Data Collection Methods

According to John (2009), data collection processes involve using a set of pre-designed questions, but still leaving room for additional questions, probing and clarifications to be included during the semi-structured interviews. The first level of data collection technique or instruments to be used in this study will be semi-structured interviews, using face-to-face and focus group interviews of the homogeneous group. Interviews will be conducted once within the duration of 1 hour per participant. Data gathered will be recorded using a tape recorder, and such data will be transcribed and re-assessed to
ensure accuracy. Notes will also be taken by the researcher. Face-to-face interviews will be conducted to explore the structure of the person's experiences, as well as to describe the meaning of the challenges and concepts. Focus group interviews consisting of 5 participants will also be conducted and will consist of all the participants researched on face-to-face interviews. Same interview schedule used on face-to-face interview will be used. The purpose of all these choices is to get more various views and ideas from different participants about the research topic. Mertens (2010:240) argues that the focus group interaction allows the exhibition of struggle for understanding of how others interpret key terms and their agreement or disagreement with the issues raised. They can provide evidence of ways that differences are resolved and consensus is built.

1.1 Ethical considerations
According to Olivier and Williams (2005), the researcher has the responsibility to protect the participants through a research study. For the purpose of this study, the following ethical measures were followed and adhered to:

- the consent;
- confidentiality;
- anonymity and privacy and;
- signing of prior consent forms.

Specific ethical measures were considered by the researcher for the purpose of this study in order to protect the rights, needs and values of the participants, these include:

- Permission to conduct this research was first obtained from the Education Department through prior arrangements;
- School/s where the research was to be conducted was identified before going to the Department for approval;
- Mutual agreement between the researcher and the principal of the school to be researched were to be reached and consent signed by the principal and;
• Contact time and duration of the research was clearly stated by the researcher and be confirmed by the principal.

1.11.1 Prior informed consent

Participants will be given informed consent forms to sign before the interviews where they agree to participate in the research. The principal will also be given consent form to sign granting permission to the researcher to conduct research in his/her school as informed by Williams (2003) under consent.

Williams (2003, citing Kvale 1996:120) states that the following information is to be conveyed to the study participants:

• the title of the research;
• the aim of the research;
• the research method to be used;
• how the outcomes will be applied and published;
• the participants have the right to withdraw from the research at any time and;
• the potential advantages of the research to educators need to be spelt out.

This has to be accompanied by specific ethical measures as an assurance to participants.

1.11.2 Confidentiality
The confidentiality aspect of the research will be emphasized to participants that data collected will not be disclosed to anyone. Voice recorder will be kept by the University and will be destroyed after five years. Williams (2003) states that, according to Singleton, Straits and McAllister (1988:454), the anonymity of respondents should be ensured as their identities should not be related to their individual responses. Each respondent has the right to choose when, where and in which manner his or her attitudes, behavior or convictions may be revealed to others.
1.11.3 Anonymity and Privacy
Participants will be assured that their names will not be disclosed. The interviews will be conducted in a private office free from interference and interruption, such as noise.

1.12 Conclusion
The background to this study has been introduced in this chapter in terms of the focus of the study on challenges experienced by non-specialist educators teaching the intellectually impaired learners, the purpose of the study, which answers the research questions, research question that are explored, rationale of the study has been explained, and its structure exploring the gaps. Chapter two provides the literature review relevant to the study.
CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION
The main objective in reviewing literature relevant to this study is to gain deeper understanding of how non-specialist educators teaching in special schools for the intellectually impaired learners face the challenges they experience on teaching these learners. According to Prinsloo (2001), the recognition that education is a fundamental right, and therefore needs to be freely available to all learners, underpins the notion that education systems should provide for, and sustain, such learning for all learners. The process of identifying the status and the needs of special education (NCSNET, 1997) culminated in Education White Paper 6 (EWP6). Special Needs Education (Department of Education, 2001). The aim of EWP 6 was to restructure the education system in order to cater for all learners. Former Minister of Education, Kader Asmal in EWP6 made it clear that special schools will be strengthened rather than abolished. Through this White Paper, the Government is determined to create special needs education as non-racial and integrated component of our education system.

2.2 Non-specialist educator’s challenges experienced in teaching in special schools for the intellectually impaired learners

Literature indicates that limited research has been conducted in special schools for the intellectually impaired in South Africa. Most researchers focus on inclusive education. This is based on inclusion of learners who experience barriers to learning in mainstream schools. Williams (2003) argues that traditionally, the mentally handicapped child has never been a focal point of education in South Africa. Opertti and Belalca´zar (2008) state that one significant consequence of differentiated curricular and institutional structures for students categorized as having special needs has been their marginalization, even segregation within the education system. The assumption that
there are "special needs children" is questionable. In South Africa, the learner with special educational needs is currently accommodated in Special Schools that cater for his specific needs. However, the South African special education system is currently under review (Olivier & Williams, 2005). Olivier and Williams (2005), citing Steenkamp, (1979) further argue that many teachers of the mentally handicapped children experience an inability to handle their occupational situation efficiently and they find it hard to cope with the unique demands of their daily tasks, such as that of a mentally handicapped child much more than ordinary educational teaching and assistance.

Supporting the above literature, Steenkamp and Steenkamp (1992:19) state that staff should possess the necessary qualifications in teaching as well as in special education. Steenkamp and Steenkamp further explain that special school children do not only require educational assistance in planning learning programmers, cognizance should also be taken of their specific needs. I argue that for the South African context, very few staff employed in special schools has relevant qualifications or specialty. They are ordinary educators who received education training without any specialization in special education teaching. Most of them were redeployed from mainstream schools due to educator- pupil ratio and a shortage of specialist educators in special schools.

Williams (2003) argues that as a result of redeployment process that took place a few years ago, many additional teachers were appointed at special schools. Initially, these teachers were excited and encouraged by the prospect of having only nine to twelve learners in a class. However, they were not aware that both teaching procedures and the needs of learners in special education differed greatly from those in mainstream schools. When they finally grasped fully the extent of these challenges, their enthusiasm generally waned quite rapidly. Williams (2003) further emphasizes that these newly deployed teachers are simply not adequately equipped for such a major shift in responsibility, primarily because most of them were never trained in teaching the mentally handicapped child. In addition, teachers from mainstream education are not trained to deal with the curriculum for the mentally handicapped child. Their common complaint is that curricular for these children are inflexible.
Non-specialist educators are confronted with challenges of having learners with multiple impairments. These learners are accommodated in one class. The contexts of special schools develop our understanding that these schools do not only cater for a homogeneous group of special needs learners. Educators do not have relevant skills and knowledge to practice effective teaching and learning in class. These educators were redeployed from mainstream schools. Ntombela (2006) argues that the disadvantage of having a separate special education is that learning difficulties are attributed to deficits within the learner, rather than within the education system and schools. Furthermore, special education tends to rely heavily on specialists (e.g. educational psychologists and psychiatrists). This leads to ordinary teachers feeling inadequate to deal with learners' special educational and sometimes physical needs.

2.3 Intellectual functioning of the intellectually impaired learners

Non-specialist educators teaching the intellectually impaired learners are faced with the unique challenges that go far beyond the normal requirement of teaching. For the purpose of this study, the concept mentally handicapped child will refer to a child whose intellectual functioning is significantly below average and whose level of development lags behind in comparison with children of the same chronological age. Therefore, he finds it difficult to adapt to the learning situation (Olivier and Williams 2005). Ellman, (2004) states that most people with intellectual disabilities do no reach the stage of formal operations necessary for independent abstract thinking and are disadvantaged by the fact that they cannot choose to exercise this mode of thought. Ellman (2004) further states that as a result learners with an intellectual disability, although they have many diverse learning characteristics, generally learn slowly and often fail to notice relevant features of what is being taught.

Slavin (2012) argues that critics argued that people who had serious disabilities were too often shut away in state institutions with inadequate educational services or were left at home with no service at all and that children with mild disabilities were being isolated in special programs that failed to teach them the skills they need to function in
the society. Williams (2003) conducted a research on challenges faced by teachers teaching the mentally handicapped child.

Some findings of the study indicated:

### 2.3.1 Different levels of intellectual ability

According to Williams (2003) teachers who came from mainstream education, observed that they found it difficult to adjust, firstly, to the differences in the intellectual levels of learners in one group and in the curricula followed in respect of so-called "normal" children and learners. Classification given below will assist non-specialist educators to design down their learning content so that it can suit the level of the learners' cognitive and social development. Educators will also know teaching approaches and strategies to be used that will suit the level of the intellectually impaired learners.

### 2.3.2 Classification of mental retardation

Friend and Bursuck (2002) argue that students with mental retardation have significant limitations in cognitive ability and adaptive behaviors. They learn at a far slower pace than do other students, and they may reach a point at which their learning levels off. Furthermore, they state that although federal listing of disability categories does not distinguish between students with mild mental retardation and those with moderate and severe mental retardation, many state listings do. In South Africa, the level of severity of a person's mental handicap is commonly defined in terms of measured intelligence or the intelligence quotient (IQ) furthermore; a mental handicap could range from mild to moderate to severe (Williams 2003). Hallahan and Kauffmann (1994) classified persons with mental retardation according to severity problems. For example;

- **Mild retardation**: A classification used to specify an individual whose IQ test score is between approximately 55 and 69. These learners require less intensive support to function. They are usually not diagnosed as retarded until they enter school and begin to fall behind in school work. Even when academic performance is recognized, it may take expert assessment to distinguish mild mental retardation from learning disability or emotional behavioral disorder;
• **Moderate retardation**: A classification used to specify an individual whose IQ test score is from 40-55. People with moderate mental retardation need considerable support in school, at home, and in the community in order to participate fully. While the academic potential is limited;

• **Severe retardation**: A classification used to specify an individual whose IQ test score is approximately 25-40. Unlike persons with mild retardation, individuals with more severe retardation often do look different from their non-disabled peers, and they are often diagnosed in infancy or before entering school and;

• **Profound retardation**: A classification used to specify an individual whose IQ score is below approximately 25. A person with severe or profound mental retardation will need more intensive support and supervision his or her entire life.

Elman (2004) argues that learners with intellectual disabilities have significant limitations in intellectual ability and adaptive (social demands of the environment) behaviours. Although many learners with an intellectual disability may develop motor, social and language skills noticeably different from the peers, many learners are not considered intellectually disabled until they enter school. These learners are classified as moderate and severely intellectually disabled.

### 2.4 Classroom strategies of handling intellectual disabilities

Olivier and Williams (2005) define that the concept mentally handicapped child will refer to a child whose intellectual functioning is significantly below average and whose level of development lags behind in comparison with children of the same chronological age. Therefore, he finds it difficult to adapt to the learning situation. As a non-specialist educator in a special school, learners with different levels of performance are found in one class, referring especially to the cognitive development of learners. The intellectually impaired chronological age does not match their mental age. A child who is 18 years old is accommodated in one class with the child who is 13 years. The 18 year old learner's intellectual ability is equivalent to a 7 year old child. The learners spend more than 3 years in one class before being promoted to the next class. This requires special adjustment by the educator and the employment of different teaching strategies.
in one group. Non-specialist educator needs to group these learners in class according to their ability. This is called differentiation. The learning content also needs to be designed down to suite their level of performance.

### 2.4.1 Discipline is more complicated
Teachers were of the opinion that disciplinary or behavioral problems in the mentally handicapped child might occur for various reasons, such as a short attention span or lack of understanding (Olivier and Williams 2005). Non-specialist educators find it difficult to discipline intellectually impaired learners. Some of these learners have Attention Deficit Hyperactive Disorder (ADHD) which makes them difficult to discipline. These learners become restless and are unable to concentrate and listen to the teacher. Autistic learners cannot be disciplined as they do not understand the concepts of discipline. Severely Mentally Handicapped (SMH) children do not understand or cannot comprehend fully what discipline means. In support of the above statement Olivier and Williams (2005) states that mentally handicapped learners tend to be very restless, moody and sensitive, which demands a lot of effort and energy from teachers to maintain discipline in the class. Further, teachers were of the opinion that disciplinary or behavioral problems might occur for various reasons in the classroom of mentally handicapped learners, such as a short attention span or lack of understanding.

### 2.4.2 Stigma is attached to special education
Teachers in special education were in a different, often more difficult, position than their colleagues in mainstream education. They are required to show compassion, patience and acceptance towards their handicapped learners, with the classroom situation fraught with the challenges and problems presented by teaching such children, often in the lack of any support, acknowledgement or appreciation (Williams, 2003). Ntombela (2006) argues that special education tends to rely heavily on specialist such as educational psychologists and psychiatrists. This leads to ordinary teachers feeling inadequate to deal with learners' special needs. In addition those who are identified as in need of special education services are often labeled 'deficient' and as needing special education services.
According to Westwood and Graham (2003) special schools and centers exist to cater for students with high support needs. These students include some with significantly impaired vision, some with moderate to severe intellectual disability, others with severe physical disability, and a few with multiple disabilities. Supporting the above literature special schools for the intellectually impaired in South Africa do not only accommodate learners who are intellectually impaired. Non-specialist educators are faced with the challenges of accommodating learners with multiple impairments in their classrooms for example; epileptic learners who have different seizures, autism, cerebral palsy, hearing impairments, visual impairments, learners with attention deficit disorders, down syndromes, speech or language impairments, learning disability and physically disabled learners. All these learners have their own special educational needs.

According to Steenkamp and Steenkamp (1992) to be able to devise realistic aims for her class group, the teacher would need: knowledge about mental retardation, child development and learning problems; information about each particular child gleaned from medical and psychological reports as well as the social background and developmental history; observation of the child to see how he moves, talks, what he finds frustrating or joyful and the way he behaves when he fails in a task or achieves success; and confidence that she and the child can work together. Furthermore, her professional training ought to be expanded by study, attendance of lecturers and discussions with colleagues. Watkinson (2006) believes that a good teacher is always aware of the learning needs of his or her class, and adapts the teaching program to match those needs. These needs may reflect the ways in which the pupils learn, or adjust to physical, emotional, social, cultural or spiritual differences. He further states that this may be due to experience, having brought up a family, or having worked with learners, both children and adults, and noticed what does or does not help.

2.4.3 The impact on teachers
Ellman (2004) argues that at present, teachers in South Africa are at the receiving end of a number of changes within education as well as broader society. Consequently they feel overwhelmed, frustrated and helpless, their perception being that decisions have been imposed upon them without their being consulted and made part of the decision
making process. These challenges results on teacher frustrations, anxiety, stress and depression. Lack of educational support, lack of teacher support, lack of infrastructure and assistive devices, lack of provision of psychological services, resulted in most educators resigning or taking early retirement. Some educators frequently absent from school or take long sick leaves. New educators end up changing their profession. “No matter what teachers or speech pathologists have to do, if they perceive that they are supported, genuinely supported, they stay” (Chambers 2008). Opertti and Belalca`zar (2008) argues that several policy suggestions has also been made. Among them are: (i) make teaching an attractive career choice, for example through improved salary and employment conditions; (ii) develop teacher knowledge and skills, e.g. through teacher accreditation and more flexible and practical teacher education programs; (iii) improve recruitment and retention; (iv) develop and implement teacher policy with teachers, e.g. by engaging them in policy development and developing professional learning communities.

From my work environment lack of assistive devices is also a contributing factor. Learners who are hard of hearing need to be taught by using the sign language. Learners who are visually impaired need braille’s to learn. Educators find it difficult to teach these learners as they do not have relevant skills. The education department does not provide specialist educators in most black special schools to teach these learners. Schools also experience great difficulties as there is a lack of useful resources and trained specialists who could render assistance to non-specialist educators. Education White Paper 6 (2001) argues that apartheid special schools were thus organized according to two segregating criteria, race and disability. In accordance with apartheid policy, schools that accommodated white disabled learners were extremely well-resourced, whilst the few schools for black disabled learners were systematically under resourced. Furthermore, the results of decades of segregation and systematic under resourcing are apparent in the imbalance between special schools that catered exclusively for white disabled learners and those that catered exclusively for black disabled learners.
Chambers (2008) argues that, we fail our teachers and subsequently fail to retain them when we repeatedly remove them from instruction and assign them to conduct assessments, attend meetings, complete paperwork, and work with other educators and the community. Although these assignments are important and necessary, they should not consume the significant portion of a special education teacher’s time that they do today. Williams, (2003) citing Steenkamp, (1979:21) states that the educator of a mentally handicapped child must do much more than simply follow a fixed and prescribed curriculum. The educator has to adapt to the specific and unique needs of the individual mentally handicapped child. The educator should feel empathy for him, not pity. The mentally handicapped child has limited reasoning powers and conceptual ability. The educator must accept this fact intellectually, cheerfully adjust to it, and be prepared to give the child adequate support. In addition, to meet the many challenges of teaching the mentally handicapped child, the educator should also be emotionally well adjusted. The educator should be knowledgeable about the abilities of and circumstances in which the child learns best.

Ellman (2004) suggests that on curricular adaptations teachers should focus on teaching only those areas of the work deemed the most important. Another option is substitution of an alternative curriculum. Furthermore to enable teachers to work effectively and efficiently with intellectually disabled learners, it is vital that teachers be given proper guidelines and provided with in-service training. As a teacher educator, you should know what a student is expected to learn, whether or not that student has a disability. A fundamental ingredient for adaptation is to make learning standard appropriate for the students as well as a natural part of the instructional environmental. You should work with a special educator to arrange learning activities suitable for reaching those standards using age-appropriate materials (Friend and Bursuck, 2002).

2.4.4 Creating collaborative efforts with parents
As an educator of the special needs learners, parents of these learners also create frustrations and stress to the educators. Ntombela (2006) argues that, although the Act makes it possible for learners with "identified" special needs to attend their neighborhood schools in the event that their parents choose not to enroll them in special
schools. Parents become in denial and do not accept the fact that their children have intellectual disabilities. Steenkamp and Steenkamp (1992) argue that parents are often in the dark as to the best way to handle the child. They may feel that such a child is their punishment for some past sin and they cannot share their guilt feelings with anyone. Therefore they put the blame on teachers as displacement of their guilty feelings. They expect educators to produce good results as the mainstream schools do and also to promote their children to the next grades even if they are not competent. Parents have lack of knowledge about the functioning and operation of the special schools. Williams, (2003) contends that the parents of children with special needs sometimes expected teachers to handle all the needs of these children.

Steenkamp and Steenkamp (1992) states that the parents know their children better and for a longer period of time and are able to bring to the teacher’s notice various aspects which can improve programmer planning and give rise to more efficient training. Furthermore, regular parent-teacher meetings where problems and needs can be discussed needs to be arranged. Information should be interchanged continuously between the teacher and the parents. There should be a close relationship between parents, teacher and child from which everyone, and in particular the child, could benefit. Friend and Bursuck (2002) argue that when you teach a student with a moderate or severe disability, you should communicate regularly with the student’s parents. Families know their children better than school professionals, and parents can provide valuable information about teaching them. Furthermore they might also have questions about how to reinforce at home skills learned at school. As a non-specialist educator parental involvement is of great importance as parents have basic education of their children as primary educators. They can be useful resources to equip the educators with the styles and methods of educating the special needs learners. Parents also know how to deal with their challenging behaviors and they can assist by transmitting their knowledge to non-specialist educators on how to deal with their children.
2.4.5 The impact of the curriculum

From my work environment educational psychologists assess the intellectually impaired learners in their schools first. Based on their assessment results these learners are then referred to special school as they are unable to cope with the regular curriculum. When these learners are accommodated in special schools redeployed educators use the very same mainstream curriculum to teach as there is no specific or specially designed curriculum for them. The Department of Education encourages the educators to try to design down the regular curriculum. Inflexible curricula within the schools have continued to exclude a number of learners from learning. For example, in the apartheid education system, education and the curricular were rigidly structured with no provision for meeting the diverse needs of learners. Furthermore, a major problem with this system was that all learners had to learn the same content, in the same manner and pace, with no exceptions save for learners in special schools or classes (Ntombela, 2006).

Watkinson (2006) suggests that it is generally agreed that all teachers need a combination of styles and approaches to tackle the variety of subjects they teach. Non-specialist educators were trained to teach in mainstream schools. Teaching styles and methods are completely different to those of special schools. Special needs educators teach according to the learner’s pace. One concept is repeated and taught more than once, a week or even a month can be spent on that concept as these learners forget easily. The teacher has to repeat. Furthermore, however, what goes on in the classroom for the learner depends on the match between what the teacher wants him or her to learn and the activities of the adults teaching and supporting the learning. Further, if anyone of these is inappropriate, then something goes wrong. The curriculum can be too hard or too easy, learners can be unhappy or uncomfortable, or adults may not know what they are talking about or understand what they are supposed to be doing.
Donald, Lazarus and Lolwana (2010) argue that because the intellectually impaired learner is often expected to do more than she is able, she often experiences failure and frustration. Having not met the needs of these learners by non-specialist educators also results in behavior problems whereby educators find it difficult to discipline them, a negative of self-worth and low frustration tolerance. Opertti and Belalca’zar (2008) argues that, first, if teachers must focus extensively on the details of curricular content, that might reduce the time they have for reflection and professional development to understand and address learners' diversities. Second, if teachers are given too little freedom to adapt the curriculum based on local or individual needs, they may not use their own skills and creativity within the learning environment. Third, the range of teaching methods allowed may limit teachers. Fourth, the principle of curriculum reform may not match teacher training and/or teachers' knowledge and skills, creating a gap between what the curricula expect teachers to master and what student teachers are actually taught.

2.4.6 Special education is different from mainstream education

Special education is more demanding than mainstream education was also confirmed in the literature. If mainstream teachers are to assume the role of special education teachers, they need to receive appropriate education and training as it an extremely demanding and challenging field (Williams, 2003). Non-specialist educators also experience difficulties in educating the intellectually impaired learners as they lack adequate skills and knowledge of designing down the mainstream curriculum and to do differentiation to suit the level of the intellectually impaired mental ability. Educators from mainstream education are never trained or given proper guidance and support on how to deal with the curriculum for the mentally handicapped child or taught how to design down the content or to do differentiation in the class of the intellectually impaired.

The problem teacher’s experience could be alleviated by varying their method of presentation in the classroom in the following manner: the volume of information taught could be reduced; the conceptual levels of assignments could be modified by reducing their complexity through arranging work into smaller steps or sub skills (Williams, 2003).
Jordan (1976) argues that the curriculum has obvious instrumental values. It is not the same as the curriculum for the non-academic, nor is it the regular curriculum. Rather, it is a different curriculum intended to equip the child with those skills needed to make a living and to become an effective human being. Williams, (2003) argues that a common complaint is that the curriculum is inflexible, therefore, these teachers display very little enthusiasm in finding appropriate content and procedures for their teaching, even teachers with proper training in special education, who have been at the school in question for several years, sometimes feel they cannot cope. Educators with proper training are confused and are confronted with the challenges of trying to adapt to the new ever-changing curriculum policies that are specifically designed for mainstream schools. The department of education imposes newly designed policies to teachers without any proper guidance on how to implement them.

In South Africa, primary school educators have indicated their concerns about a perceived lack of relevant pre-service training. These educators believe that they are insufficiently trained to cope with the special needs of a learner with a (intellectual) disability if placed in their classroom. A few other concerns are class size, the lack of resources and the behaviour of the learner with an intellectual disability (Ellman, 2004). Learners in these classes possess different disabilities and have their own specific needs. Classes are overcrowded with teacher-pupil ratio ranging from 16 to 18 in one class. There are no resources. Ellman, (2004) states that these learners do not demonstrate learned skills spontaneously, and have difficulty generalizing learned skills to new situations. Further, they have difficulty learning complex skills and abstract concepts and learn less overall in comparison to other learners. Many of these learners have memory deficits, either remembering incorrectly or not remembering automatically. They also need additional cues to help them focus their attention. Non-specialist educators need to put more focus on the ideas and literature that gives more guidelines with the strategies of teaching the intellectually impaired learners that may assist them when experiencing difficulties.

Donald, Lazarus and Lolwana (2010) provide the following guidelines for teaching the intellectual disabled learners:
• **Identification**: It is most important to establish whether student’s problem is due to intellectual disability or to some other conditions. A full psychological assessment is desirable;

• **Patient and systematic teaching**: In particular, be prepared to repeat often, to break the work up into small steps, and to be as concrete as possible in your demonstrations and explanations on any topic;

• **Attention to language development**: Communication skills are usually a problem with mild intellectual disability;

• **Basic scholastic skills**: The principle of mastery learning, where the student is given as many repetitions, and as long as is needed, to really ‘master’ the skills or concept are important here;

• **Scaffolding**: Modeling and then helping a student to use basic but more effective ways of remembering and problem-solving, for instance, can have positive ripple effects on a range of other scholastic and everyday tasks, as well as on general intellectual functioning and;

• **Life-coping skills**: Such skills can help them to become more independent and self-supporting by the time they leave school.

### 2.5 Conclusion

Literature has been reviewed in this chapter to explore other researchers’ findings on challenges experienced by non-specialist educators teaching the intellectually impaired learners in special schools. This chapter indicates that there was a need for conducting the study that would look at the context of non-specialist educator’s experiences teaching in special schools for the intellectually impaired.
CHAPTER 3

Conceptual and Theoretical Framework

3.1 Introduction

The theoretical and the conceptual framework of this study are drawn from the literature review above. The conceptual framework comprises of different concepts which forms the major part of this study. Concepts underpinning this study are special schools, special needs education and the intellectually impaired learners. A full description of these concepts will be given in this chapter. The theoretical framework used to interpret and understand the data comprises of two theories namely; cognitive constructivism as informed by Jean Piaget and social constructivism by Lez Vygotsky. These theories are relevant regarding the research questions of this study. Powell and Kalina (2009) contended that while social and cognitive constructivist theories are different there is one major similarity; the way constructivist classroom should be run. "Both Piaget and Vygotsky agreed that the teacher's role was that of a facilitator and guide, and not of a director or dictator. In addition, teachers and students must communicate to convey information and for learning to take place.

3.2 Conceptual Framework

Several key concepts that give rise and a brief overview to the conceptual and theoretical framework of this study are clarified below.

3.2.1 Special schools

The term 'special schools' refers to a school that is equipped to deliver education to learners requiring high-intensive educational and other support either on a full-time or part-time basis (Mayaba, 2008). Further, the special school offers education that is modified or particularized for those having singular needs or disabilities, as disabled or maladjusted people, slow learners, or gifted children. Working in an environment of special schools teaching the intellectually impaired learners in special schools provides
greatest challenging experiences and is an important starting point in reviewing literature and how these experiences are viewed by non-specialist educators. A brief overview of special schools in other countries is given below.

3.2.2 The concept special schools on the International Level

*In South Australia* special schools and centers exist to cater for students with high level of support needs. These students include some with significantly impaired vision, some with moderate to severe intellectual disability, others with severe physical disability, and a few with multiple disabilities. In addition, Centre for hearing-impaired students are also provided, even though many children with impaired hearing are supported in full-time mainstream settings (Westwood and Graham, 2003).

3.2.3 Special school on the National Level

According to John (2009) the educational reforms of 1994 special schools were still seen as the most appropriate way to educate children with special needs. In Education White Paper 6 (Department of Education, 2001), a special school is a school catering for students who have special educational needs due to the severe learning difficulties, physical disabilities or behavioral problems. Special schools are acknowledged as providing a critical service to learners who are in need of concentrated support. In addition, the Education White Paper 6 seeks to further improve the quality of education offered by these schools. Special schools may be specifically designed, staffed and resourced to provide the appropriate special education for children with additional needs. Students attending special schools generally do not attend any classes in mainstream schools. Special schools provide individualized education, addressing specific needs.

From the researchers work experience I have discovered that in South Africa special schools for the intellectually impaired fall under the category of foundation phase i.e. from grade one (age seven) to grade three (age eighteen which is the exit age). Because these learners do not get employment when they exit school, special schools keep them till the age of twenty three (23). In mainstream education an eighteen year
old learner is in grade twelve or matric. Some of the learners that are accepted into the grade one program at the chronological age of seven have the mental ability of a three or four year old child. A learner who is in the middle group has the chronological age of 12 years with the mental ability of a seven year old child. Sixteen years and over have the mental ability of a twelve year old child. These learners are therefore kept in one grade for three to four years before they are condoned to the next phase which is the intermediate or middle group. They are condoned because of their chronological age not because of mastering the curriculum. At the age of sixteen (16) these learners are condoned to the prevocational class where they are taught various skills. Girls are placed in the domestic science where they learn cooking, baking, dressmaking, cleaning and laundry. Boys do woodwork, leatherwork and welding. Amongst these learners some of them cannot cope meaning that they are “Left behind”. Those who manage to grasp the practical part of the work taught excel.

In the field of my working environment grades are categorized into educable and trainable mentally retarded classes. According to Olivier and Williams (2005) educable refers to students who can progress academically to a late elementary level. Trainable refers to the students who are still capable of learning personal hygiene and other living skills in a scheduled setting, such as a group home. Special schools are known as LSEN schools (Learners with special educational needs). The aim of Education White Paper 6 was to restructure the education system in order to cater for all learners. The Former Minister of education Kader Asmal made it clear that special schools will be strengthened rather than abolished. Through this Education White Paper 6, the Government is determined to create special needs education as non-racial and integrated component of our education system. In South Africa an example of a special need that may require the intensive services a special school provides is mental retardation.

The Bill of Rights (The South African Constitutional Assembly, 1996) provides a framework for inclusive education in the country. It is expected that specialized assistance will be made available through mainstream education in future and that the curriculum will be flexible enough to accommodate the special needs of, in this case,
also he mentally handicapped child (Olivier and Williams, 2005). According to Steenkamp and Steenkamp, (1992), in the special school the child becomes a member of a group equals. Here he can compete with other children who also find it hard to catch the ball. Special school offers a special therapeutic environment in which the child can flourish; it offers special educational programs adapted to the child’s abilities; it offers special staff that understand these children and are trained to help them.

3.3 Special Educational Needs (SEN)

3.3.1 Special Educational Needs in South Africa

The process of identifying the status and the needs of special education (NCSNET, 1997) culminated in Education White Paper 6; Special Needs Education (Department of Education 2001). Education White Paper 6 (Department of Education, 2001) has put forth proposals and plans to ensure that every child has access to a quality education in South Africa. This is similar to the law called the “No Child Left behind Act” (John, 2009). William and Olivier (2005) argue that special needs exist where learners require special help and support if they are to overcome the particular contextual, social and individual disadvantages they face. Special educational needs require the provision of different or additional resources for children on account of some degree of disability or impairment. The report of NCSNET and NCESS (1997 argues that there is a need to examine the social and political processes that operate within the education system that include children. This approach is particularly relevant in countries where inadequate facilities, inadequate educator development, poverty, and other social and political factors impact on learning process. In order to reconstruct special needs education, the focus has to be on the development of the education system so that it can recognize and respond to diversity in the student population rather than merely focus on supporting individual learners (Engelbrecht and Green 2005).

The term “learners with special educational needs” (LSEN) was used for the first time in England where it appeared in an important report on education, the Warnock Report on Special Educational Needs in 1978. Since then it has been used increasingly in other
countries. This includes South Africa in the Report of a Working Committee: Children with Special Educational Needs (HSRC 1981) and in the new White Paper on Education and Training in a Democratic South Africa, 1995, and in the South African Schools Act 84 of 1996 (DuToit, Landsberg and Levitz, 2003). According to White Paper 6 (2001) in South Africa the Minister of Education appointed two commissions: the National Commission on Special Needs in Education and Training (NCSNET) and the National Committee for Education Support Services (NCESS) to investigate and make recommendations on all aspects of 'special needs and support services' in education and training in South Africa. In support of the above statement, Ntombela (2006) states that in 1996, the NCSNET and NCESS were commissioned to educate educational provision for learners experiencing special needs in education, and to give advice to the ministry of Education on the restructuring of special needs of special needs education in line with the government's commitment to realize equity and redress in all aspects of education.

Ntombela, (2006), citing Department of Education, (1997) states that the term “special educational needs” imply that these learners have needs that are different from those of the average learner, that is why needs are “special”. South African Schools Act attempted to promote interaction and to reduce the distance between regular and special education, but to date there has been very little collaboration or interaction between them. Furthermore, as highlighted in the report by NCSNET and NCESS, (1997) this Act, in its conceptualization of “special needs”, shows no significant shift from the historical deficit understanding. The mentally handicapped child has special educational needs and is thus often regarded as 'special' in the sense that he requires assistance and support to overcome contextual, social and individual difficulties. These difficulties may also include slow cognitive development (reasoning, problem solving, remembering and generalizing), as well as slow language development (Olivier and Williams, 2005).

The Warnock Report of 1978 was entitled “Quality education for all” in the sense that in teaching special needs refer to the needs of an individual or a system that should be addressed. These special needs are however caused by barriers within the person
himself, the curriculum, the learning, the school, the education system and the broader social context (Du Toit, Landsberg and Levis, 2003). All of the above issues are related to the challenges experienced by educators teaching learners with special educational needs in special school in South Africa. Prinsloo (2001) suggests that the most important problem that has to be overcome in this process is the training and empowerment of teachers to identify and effectively support learners who experience barriers to learning. Special Education in the United States: All special needs students receive an Individualized Education Program (IEP) that outlines how the school will meet the student’s individual needs. The individuals with Disabilities Education Act (IDEA) require that students with special needs be provided with a Free Appropriate Public Education in the Least Restrictive Environment that is appropriate to the student’s need.

3.3.2 The intellectually impaired

The mentally handicapped child deviates from the majority of children in body, mind or behavior, to such an extent that he cannot derive sufficient benefit, make progress or develop from the instruction provided in mainstream education. Furthermore, he requires education of a specialized nature to facilitate his adaptation, and should not attend an ordinary class in an ordinary school (because such attendance may be harmful to himself or to other learners in that class), but he is nevertheless partially educable (Olivier and Williams 2005). According to Slavin (2012) mental retardation is a disability characterized by significant limitations both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills. Williams (2010) claims that within the context of the present study, the very nature of the professional role affects special needs educators’ experience of their work. This is due to their close interaction with learners who demonstrate severe intellectual (learning) disabilities and require high level of support.

The term cognitive disability is sometimes used instead of mental retardation. Seizures, cerebral palsy, down syndromes, behavior problems and other health problems for example; chronic illnesses are associated with intellectual impairments. People with
mental retardation have less capacity for learning and learn at a slower rate. Below average intellectual abilities affect all areas of life—a person's ability to use language, work skills, social skills (Friend and Bursuk 2002). Educators educating these children in their classes face major challenges. They have to cater for all these learners needs as each teacher has a responsibility to accept these learners in their classes. They also have to adapt their educational and learning-support strategies so that these learners make progress in their classes. The intellectually impaired learners have lack of self-esteem and self-actualization, lack of self-reliance and self-confidence. They are faced with the challenges of being labeled and stigmatized. They view themselves as failures. According to Ellman (2004) learners with intellectual disability exhibit learned helplessness. This is the belief that failure will crown even the most extraordinary efforts. This is always reflected in the response “I can’t “when asked to do an activity, without even attempting the activity. Following on the next paragraph is the theoretical framework which is underpinned by the theories of Piaget and Vygotsky.

### 3.4 Theoretical Framework

According to Powell and Kalina (2009) an effective classroom, where teachers and students are communicating optimally, is dependent on using constructivist strategies, tools and practices. There are two major types of constructivism in the classroom namely: cognitive or individual constructivism by Piaget depending on social constructivism on Vygotsky's theory. Furthermore, similarities include enquiry teaching methods and students creating concepts built on existing knowledge that are relevant and meaningful. Within the field of educational psychology the researcher found a distinct relationship in these theories as they work together as a system within the child’s development. These theories are relevant to this study as the intellectually impaired fall under classification of cognitive and social developmental stages of the child. Engelbrecht and Green (2005) states that Piaget and Vygotsky used information-processing model which provides valuable insight towards a better understanding of the learning process.

Educators find it challenging to teach intellectually impaired learners as there is a distinct gap between teacher training and the teacher's knowledge, skills and expertise.
The theoretical framework of underpinning this study provides a link with this literature review with reference to Powell (2009). Powell (2009) emphasizes that to be effective in constructing learning, teachers need to understand both theories (cognitive and social constructivism) as well as, know how to incorporate constructivist teaching methods, strategies, tools and practice to develop an effective learning environment. White Paper 6 (2001) of Special Needs Education states that specialized education and support were provided on a racial basis, with the best human, physical and material resources reserved for whites. Further, while some attention has been given to the schooling phase with regards to 'special needs and support', the other levels of education have been seriously neglected.

EWP6 (2001) and current research mainly focus on challenges experienced by educators on inclusive education in mainstream schools. Through conducting literature review I experienced great difficulty finding the study relevant to this research focus as research exploring challenges in special school in South Africa is very limited. According to Powell and Kalina (2009) constructivism is a vague concept, but is currently discussed in many schools as the best method for teaching and learning. In order for teachers to use it effectively, they have to know where the student is at a given learning point or the current stage in their knowledge of a subject so that students can create personal meaning when new information is given to them. Furthermore, when in the classroom; teachers have the potential to teach constructively, if they understand constructivism.

3.4.1 Cognitive Constructivism (Jean Piaget)
Cognition involves processes that are associated with a person’s intellectual functioning and thoughts, and includes such things as memory, abstract reasoning, and the ability to understand events, creative thinking, and critical thinking. Piaget’s main focus of constructivism has to do with the individual and how the individual constructs knowledge. Piaget’s theory of cognitive development proposes that humans cannot be given information, which they immediately understand and use: instead, humans must construct their knowledge. Constructivist teaching strategies have a great effect in the classroom both cognitively and socially for the students. Further, a teacher must
understand and use methods of both cognitive and social constructivism, if he or she is to run an effective constructivist classroom (Powell and Kalina 2009 citing Piaget, 1953).

According to Powell and Kalina (2009) Piaget’s four stages of development are:

**Table 3.1 Four stages of development:**

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensorimotor stage:</td>
<td>Children begin to discover their environment around them through their own senses and physical activity and then language as they get older within this stage.</td>
</tr>
<tr>
<td>Preoperational stage:</td>
<td>Children develop their own language skills but still cannot grasp the thoughts of others. There is “symbolic function” where children begin to distinguish pictures and symbols for different objects.</td>
</tr>
<tr>
<td>Concrete operational stage:</td>
<td>A pivotal growth point in the brain in logical development, children begin to replace intuitive thought with their own logical reasoning, and</td>
</tr>
<tr>
<td>Formal operational stage:</td>
<td>Children, up to adulthood, will start using higher levels of thinking or abstract ideas to solve problems,</td>
</tr>
</tbody>
</table>

Piaget’s stages of development work as a system. Equilibration occurs when children shift from one stage to another and is manifested with a cognitive conflict, a state of mental unbalance or disequilibrium in trying to make sense of the data or information they are receiving (Powell and Kalina, 2009). When one stage of cognitive development is affected it becomes a recurring and child’s intellectual functioning becomes a
problem. Piaget's stages of development were built while he was observing his own children growing as they learned and played together (Powell and Kalina 2009). Vygotsky (1962, 1978) would agree with Piaget that there is a progression across childhood and adolescence towards more complex and more abstract thinking abilities. He would not agree that there are discernibly different stages of development (Engelbrecht and Green, 2005). Piaget's children were normal children who had no qualities of being intellectually disabled.

According to Powell and Kalina, (2009) Piaget's stages are well-known and are accepted as the basis for depicting the growth of logical thinking in children. Although there has been criticism of his specific stages, Piaget's theories still hold true and are revered by many theorists. Aligning myself with the above statement I find a distinct gap with the growth of logical thinking in children. As a non-specialist educator, the intellectually impaired children do not all possess growth of logical thinking which is one of the experiences encountered by non-specialist educators. Because of this cognitive deficit strategies and methods of teaching these learners are completely different and educators need to be familiar with relevant teaching methods that will provide individual special needs of each learner. Watkinson (2006) states that a good teacher is always aware of the learning needs of his or her class, and adapts the teaching program to match those needs. These needs may reflect the ways in which the pupils learn, or adjusting to physical, emotional, social cultural or spiritual differences. He further states that some of the ways in which we adapt what we do are instinctive, because of our personalities; some people are more able than others to empathize with other people. This may be due to experience, having brought up by a family, or having worked with learners, both children and adults and noticed what does or does not help.

Working in the environment with the learners who are intellectually impaired Piaget's stages of development do not match the cognitive development of special needs learners. Piaget's stages only focused on the developmental stages of normal children who had no intellectual disabilities. The cognitive development (IQ) of the intellectually impaired learners does not match their chronological age (CA) as indicated in 3.2.3. The Department of Education together with the curriculum designers are also for the idea
that intellectually impaired learners’ cognitive development matches the developmental stages of the normal children. This is proved by the fact that the learners in special schools use the very same curriculum as mainstream schools. Non-specialist educators are confronted with the problems of not knowing how to teach the special needs learners as the content in the textbooks is far more advanced than the learners’ intellectual functioning.

Having attended workshops organized by the Education Department on new curriculum to be implemented by educators in schools, special school educators are always confronted with the problem of being excluded when material is distributed to schools. All what the Departmental officials could say is that special schools are not allocated or catered for and they do not fall under this category, only mainstream schools are allocated. The reason given to special schools educators is that the department is still designing special school’s relevant curriculum. This has been an ongoing excuse since 2004 when I started working as a non-specialist educator in one of Pietermaritzburg special schools. Principals and parents in these special schools need to see learners being taught irrespective of the fact that there is no specifically designed curriculum for the intellectually impaired learners. Non-specialist educators receive no support or guidance from the education system. Principals of special schools give non-specialist educators policies that need to be implemented without proper guidance or explanation but expect them to teach effectively with no complaints.

According to Watkinson (2006) the overall impression is that central directives are trying to make one pattern fit all kinds of school and all sorts of learners. In a Watkinson (2006) argues that ‘Learning’ is put before ‘teaching’ rather than the more usual phrase ‘teaching and learning.’ The role of the teacher, in having appropriate skills for different situations, being themselves sufficiently well informed, being sensitive to various needs of learners and being responsible for the progress of the learners in their care, is still paramount. Donald, Lazarus and Lolwana, (2010) argues that Piaget sees people as actively engaged in an on-going process of adaptation. In cognitive terms, people adapt by continually organizing and re-organizing information and experiences. Gradually, this process creates a better fit between the worlds as a person experiences it and the way
she understands it. Therefore, non-specialist educators need to adapt to the new teaching approaches and become actively engaged re-organizing their past teaching strategies and experiences of teaching the normal children in mainstream schools to fit in the new world of special schools for the intellectually impaired learners.

### 3.4.1.1 Assimilation and Accommodation

According to Piaget assimilation is when new information arises that can fit into a child’s existing map, a process of assimilation occurs. Accommodation is when new information arises that contradicts or conflicts with the child’s map modifying existing schemes to fit new situation (Donald, Lazarus and Lolwana (2010). Assimilation is when children bring in new knowledge to their own schema and accommodation is when children have to change their schemas to “accommodate” the new information or knowledge. Furthermore this adjustment process occurs when learning, as one is processing new information to fit into what is already in one’s memory. Teachers need to facilitate this process in the classroom (Powell and Kalina 2009).

Jobling and Moni (2004) stated that students initially had difficulty remembering the concept of beginning, middle and end. Working in the environment of special schools created the challenge of not being able to transmit knowledge to special needs learners due to lack of specialized training. Intellectually impaired learners do not possess abstract thinking. These learners find it difficult to link the existing knowledge with the new knowledge. Giving them too many instructions at one time creates confusion and they become unable to recall memory. The process of assimilation and accommodation which are the processes included on Piaget’s theory are affected in the children's cognitive development because of the challenges experienced by non-specialist educators. Effective teaching and learning is hindered as the children's schema is constructed through the process of assimilation and accommodation, when going through Piaget’s four different stages of development.

### 3.5 Social constructivism

According to Powell and Kalina (2009) social constructivism is a highly effective method of teaching that all students can benefit from, since collaboration and social interaction
are incorporated. Lev Vygotsky, the founding father of social constructivism believed in social interaction and that it was an integral part of learning. In addition, understanding Vygotsky's theories or building a classroom where interaction is prominent helps develop effective classrooms. Social constructivism will engage students in activities creating relationships that will directly affect what they learn. By creating positive atmosphere effective teaching and learning takes place therefore non-specialist educators need to promote good collaboration and communication with the learners. Good communication will result in good social interaction. Donald, Lazarus and Lolwana (2010) indicate that the most far-reaching educational implication of Vygotsky’s theory is his insight into the social construction of knowledge. Knowledge, in other words, is not fixed: it varies across different social contexts and historical times, and it is built and passed on through social interaction. It is always in a process of construction and reconstruction, socially and individually by you and by your students.

According to Donald, Lazarus and Lolwana (2010) teaching needs to promote active, guided exploration and continuous adaptation, since these underpin all development. Piagetian theory, especially, reveals how cognitive development involves continuous, active exploration and adaptation. In addition, effective teaching therefore, cannot be a one-way process. Neither can teacher or student be passive. Both teacher and student must actively explore and adapt to their physical and social environment. Furthermore, in order to achieve this, teachers should always be searching for more effective ways of connecting with their student’s learning process. Powell and Kalina (2009) identified Vygotsky’s theory as foundation of constructivism which asserts three themes that are relevant to this study; Zone of Proximal Development (ZPD), More Knowledgeable other (MKO) and Social interaction.

3.5.1 Zone of Proximal Development (ZPD)

Zone of Proximal Development is the distance between a student’s ability to perform a task under adult guidance and/or with peer collaboration and the student’s ability solving the problem independently. Vygotsky’s learning occurred in this zone (Powell and Kalina, 2009). An educator who is unable to give guidance and to provide effective...
teaching and learning to special needs learners, due to lack of specialized training and inadequate teaching skills will be unable to master this zone. For Vygotsky, the Zone of Proximal Development (ZPD) represents the gap between what student can accomplish with assistance and what that student can accomplish on his own. This is a pedagogical breakthrough in that it implies that a teacher, or, at the very least, a culturally more advanced peer, is developmentally necessary in order to signpost the dialogical or interactive nature of learning (Donald Lazarus and Lolwana, 2010).

Powell and Kalina (2009) supports that the ZPD has been described as a zone where learning occurs when a child is helped in learning a concept in the classroom. By assisting children in learning, many theorists and educators have proven that Vygotsky’s theory works. More Knowledgeable Others refers to anyone who has better understanding or a higher ability level than the learner, with respect to a particular task, process, or concept. The MKO is normally thought of as being a teacher, coach, or older adult, but the MKO could also be peers, a younger person, or even computers (Powell and Kalina, 2009). A teacher is regarded as the major source of information and as the person who has been trained with the skills of teaching the learners.

According to Engelbrecht and Green, (2005) citing Moll, (1990) Vygotsky argues that the cognitive development is not a process that any child accomplishes alone. More knowledgeable others, and the artifacts of the culture itself, mediate to children what to attend to, and how to understand the world, others and themselves. Furthermore, in constructing meaning with others, children both gain concepts and experience the collaborative use of psychological tools. The role of the adult is to assist children to acquire language in ways that enable them to take control of their own learning. This implies the value of cooperative learning settings, so that learners can interact around tasks and problems within each other’s zone of proximal development. In this process the educator should act as mediator of the learning process by means of scaffolding. In addition, scaffolding refers to support for learning and problem solving in various forms, such as clues, encouragement, breaking down the problem into steps, and providing examples (Engelbrecht and Green, 2005). Donald, Lazarus and Lolwana (2010) argue that the term ‘scaffolding’ is very appropriate for teaching and learning process.
Metaphorically, this is exactly what happens when teachers scaffold key knowledge structures and learning strategies for their students. In addition, by developing the student’s grasp of a structure of a knowledge area, scaffolding helps him to reach a more powerful level of understanding. Non–specialist educators need to adapt to these various scaffoldings to eliminate challenges they experience teaching the intellectually impaired.

Mayaba (2008) identified four types of scaffolding. These are:

- **Explicit modeling** – Non-specialist educators need to provide concrete examples by doing while explaining concepts step by step;
- **Direct explanations and re-explanations** – Non-specialist educators need to give direct explanations by means of verbal instructions;
- **Re-explanation to some of the learners who are slow to grasp might be needed**;
- **Invitations to participate in the conversation** – Learners need to be actively involved and encouraged by non-specialist educators to participate during teaching and learning and;
- **Verifying and clarifying student understanding** – Non-specialist educators need to view and verify the learner’s work clarifying the work not well grasped or understood by the learners.

### 3.5.2 Social Interaction and Cooperative Learning

According to Donald, Lazarus and Lolwana (2010) knowledge, in other words, is not fixed: it varies across different social context and historical times, and is built up and passed on through social interaction. It is always in a process of construction and reconstruction, socially and individually- by you and by your students. Powell and Kalina (2009) argue that according to Vygotsky cooperative learning is an integral part of creating deeper understanding. Cooperative learning is a part of creating a social constructivist classroom. Students should not only work with teachers one-on-one, but
they should also work with other students. Further, teachers can create work experiences for students to collaborate with each other to construct cognitive or individual internalization of knowledge.

Non-specialist educators need to understand how constructive learning happens and how it can be made effective. Working in collaboration with different stakeholders for example, psychologists, therapists, specialist educators and others who have worked within the environment of special needs learners can also assist and equip non-specialist educators with the skills of educating and teaching the intellectually impaired learners. Parents and community members are primary educators who spend most of their time with these learners. They have different strategies and methods of dealing with these learners. Donald, Lazarus and Lolwana, (2010) states that these immediate social interactions occur at such levels as families peer groups, schools, and classrooms and local communities. Proximal interactions at these levels powerfully shape the development of individual children. Furthermore, new or adapted meanings and knowledge are produced when people from different social context and points of understanding interact with one another.

3.5.3 Tools and Practices for the Constructivist Teacher

According to Powell and Kalina (2009) teachers from every subject area need to develop psychological or strategic tools to create a constructivist environment for all students. In order to ensure an effective constructivist environment, teachers need to learn teaching strategies or activities that employ the theories of both Piaget and Vygotsky when assigning tasks or part information. Furthermore, acquiring knowledge, experience or understanding is common to all of them. In addition Powell and Kalina (2009) argue that it is important that teachers and learners develop trust and openness in the classroom for all students to become engaged and attentive. The constructivist classroom allows effective learning where light can be shed so that imagination, knowledge and inspiration can glow within each individual student. Watkinson (2006) argues that good learning and teaching should:

- Ensure every child succeeds;
• Build on what learners already know;

• Make learning vivid and real;

• Make learning an enjoyable and challenging experience;

• Enrich the learning experience and;

• Promote assessment for learning.

3.6 Conclusion

The main focus of this chapter was underpinned by two major types of constructivism designed by Piaget’s cognitive constructivism and Vygotsky’s social constructivism. According to Powell and Kalina (2006) teachers need to be familiar with these constructivist theories. It is possible to understand and apply constructivist teaching strategies and practices in the classroom. The following chapter will deal with the research design and methodology of this study.
Chapter 4

Research Design and Methodology

4.1 Introduction

This chapter presents the research design in order to show how the researched was conducted and data collected. This chapter discusses interpretive research paradigm, sampling, data collection methods, interviews, observations and the ethical considerations of the study used to explore challenges experienced by non-specialist educators teaching in special schools for the intellectually impaired learners.

4.2 Research Design

According to Williams (2003) the research design is a plan of how one intends to conduct one's research. It indicates what should be researched, how the information will be gathered, and how it will be recorded. Betram (2004) supports that essentially the research design is the plan of how the researcher will systematically collect and analyse data that is needed to answer the research question. It is the designed and planned nature of observation that distinguishes research from other forms of observation. McMillan and Schumacher (2006) states that a research design describes how the study was conducted. It summarizes the procedures for conducting the study, including when, from whom, and under what conditions the data will be obtained. Furthermore, the purpose of a research design is to specify a plan for generating empirical evidence that will be used to answer the research questions as stated below:

1. What are the challenges experienced by non-specialist educators in teaching the intellectually impaired learners in special schools?

2. What can be done to address these challenges?
These two research questions will direct this study to fulfil the aims of this research which are to explore the challenges experienced by non-specialist educators teaching the intellectually impaired learners in special schools and why they experience these challenges the way they do. Anderson and Burns (1989) quoted two basic questions from Willems and Raush that are more general than issues of research technique about the research design:

- How do I obtain interpretable data?
- “Given a purpose or set of purposes, a question or set of questions, what kind of investigative exercises, operations, and strategies should I embark upon to fulfil the purposes and answer the questions?”

The research design underpinning this study is naturalistic, descriptive, contextual and interpretive (focused on meaning and explanation) in nature.

4.2.1 Naturalistic

This study is naturalistic in the sense that it is conducted in its natural setting of being a special school. Intellectually impaired learners are accommodated in this setting and are being by non-specialist educators who were mostly redeployed from mainstream schools. According to McEwan and McEwan (2003) qualitative research is naturalistic in that researchers (observers) go where the research is. As a researcher in this study a special school where non-specialist educators teach the intellectually disabled learners, to talk with them about the challenges they experience teaching these learners (i.e. exploring the phenomenon). I also want to gain new insight and a better understanding of whether non-specialist educators’ challenges experienced are similar or different.

4.2.2 Descriptive

Furthermore, McEwan and McEwan (2003) state that qualitative research is also descriptive. Words are the coinage of qualitative researcher who takes in as much detail and information as possible, recording the most significant and seemingly unimportant descriptions. Qualitative researchers write rich and multifaceted descriptions. In support,
William (2003) states that a detailed and accurate description of the research will serve as a basis for the generation of guidelines derived from the research data gained through interviews. Challenges explored during this research will be described in the form of words. A full description of the findings from the participants which are non-specialist educators will be recorded and transcribed.

4.2.3 Contextual

William (2003) defines context as the particular set of conditions within which interaction strategies are employed. Therefore, the primary aim is to provide an extensive and dense description of the phenomenon as it occurs. Further, the guidelines and findings were interpreted in an educational context and perspective which rendered the study even more contextual. This study takes place in a special school for intellectually impaired learners. Participants are homogeneous group of non-specialist educators at the institution. Contextual approach is used to cover the challenges experienced by these educators teaching the intellectually impaired learners.

4.2.4 Focused on meaning and explanation

Qualitative researchers are constantly focused on explaining and interpreting what they observe, hear, and read. Qualitative researcher asks multiple and on-going questions about how and why things work the way they do in particular settings. For example in this study, why non-specialist educators experience the challenges teaching the intellectually impaired learners and they experience these challenges the way they do? Qualitative researchers are constantly considering a variety of possible interpretations and explanations about what they have observed (McEwans and McEwans, 2003).

4.3 Qualitative Research Method

According to McEwan and McEwan (2003) qualitative research relies on observation and written description. Qualitative researcher deals primarily in words and pictures while the quantitative researcher uses numbers and statistics. Qualitative research method is adopted in order to gain rich in-depth information, understanding and first-
hand information from the participants’ perception of social reality and their everyday life experiences of the challenges experienced by non-specialist educators teaching the intellectually disabled. Singh (2009) argues that the goal of qualitative research is to explore and understand a central phenomenon, which is the concept or process explored in a qualitative research study. Furthermore, qualitative researcher collects words (text) and images (pictures) about the central phenomenon. The data is collected from the people immersed in the setting of everyday life in which the study is framed. The researcher serves as an instrument of data collection and asks the participants broad, open-ended questions to allow them to share their views about the experiences of the phenomenon.

McEwan and McEwan (2003) states that qualitative research is simply a set of information-gathering techniques or methodology (i.e. interviewing, observation, and document analysis). Since this study adopted a qualitative approach the following research instruments are used for data collection, namely:

- In-depth semi-structured interviews whereby individual and group interviews with selected non-specialist educators were conducted. Interviews are used as they will give the researcher the opportunity to listen to the participants expressing their views and;

- The classroom observations of the educators’ teaching to confirm whether data collected during interviews corresponds with what happens in class.

The researcher will therefore conduct a case study research to gain in-depth rich information from the participants.

4.4 Research Methodology

According to Mckenzie and Knipe (2006) the most common definitions suggest that methodology is the overall approach to research linked to the paradigm or theoretical framework while method refers to systematic modes, procedures or tools used for data
collection and analysis of data. Methodology refers to how evidence is gathered and meaning derived from it (Anderson and Burns, 1989). They further state that qualitative methodology has been primarily associated with case studies, ethnographic description, interviews and long-term observations, and the discovery of meaning in social phenomena. Research method that is relevant to the study is qualitative research as I am investigating the challenges experienced by non-specialist educators teaching the intellectually disabled in one of the special schools. Jali (2009) argues, ”My assumption is that there is no single reality about impairment, no knowledge about the world as it is experienced by the participants. This study is mostly overlooked by other researchers as their main focus is on inclusion in mainstream schools. Interviews and observations are conducted to collect verbal and textual data. Data collected is recorded and interpreted. Field notes are also taken.

The theoretical framework of this study falls within social constructivism as I am studying human construction of reality based on their explanation of experiences about the challenges. I constructed meaning based on their experiences to understand it. According to Radnor (2002) everyone has their own view on what they perceive reality to be. With such a view, there has to be a particular relationship going on between the researcher and the people that are being researched. As this study focuses on collecting verbal, non-verbal and textual data which will be interpreted, interpretive approach is used.

4.5 Interpretive Paradigm

According to Anderson and Burns (1989) interpretive inquiry is typically more descriptive than confirmatory research. In part this is because one of its purposes is to understand the inner perspective and meaning of actions and events of those being studied. It is also due to the fact that words are the primary form of data and words can often convey more subtle and deeper meaning than can numbers. This research adopts an interpretive research paradigm as guided by the nature of the research questions. Bertram (2004) believes that researchers working within an interpretive approach
believe that the world is changeable and that it is people who define the meaning of a particular situation. As an interpretive researcher my role is to describe and interpret data collected through interviews and observations. William (2003) explains that interpretive approach sees social reality as having a subjective component to it and as rising out of the creation and exchange of social meanings during the process of social interaction citing Sullivan (2001:48). Cohen, Manion and Morrison (2011:17) argue that the central endeavour in the context of the interpretive paradigm is to understand the subject world of human experience. To retain the integrity of the phenomena being investigated, efforts are made to get inside the person and to understand from within. This definition is relevant to my study as my questions are interpretative in nature.

The study conducted focuses on the challenges experienced by non-specialist educators teaching the intellectually impaired learners. I want to understand their challenges and why they experience them the way they do. These experiences are socially and experientially based. According to McKenzie and Knipe (2006) the interpretive researcher tend to rely upon the 'participants' views of the situation being studied ' and recognizes the impact on the research of their own background and experiences, citing (Creswell, 2003 p.8). These personal experiences generate valid and reliable data based on sound knowledge of the phenomenon. Therefore, personal in-depth phenomenological interviews as the focus of this study will be interpreted.

4.5.1 A Case Study

A case study is also used as a general approach to research an in-depth enquiry into how non-specialists educator’s challenges are experienced in Pietermaritzburg special schools. These educators are from the population of special school educators. This research is conducted within its real life context. According to Bertram (2004) a case study is an in-depth study of one particular case, where the case may be a person (such as a teacher, or a learner, or a principal, or a parent), a good group of people (such as family or a class of learners), a school, a community, or an organization. Furthermore, case studies are style of research that is often used by researchers in the interpretivist paradigm. John (2009) clarifies that the interest in case study is in process rather than
outcomes, in context rather than a specific variable, in discovery rather than confirmation. To enable the researcher to conduct interviews and to gain access to the participants’ permission was to be granted first by the principal.

4.5.3 Sampling

According to McMillan and Schumacher (2006) participants are the individuals who participate in the study, and from whom data are collected. Williams (2003) believes that sampling refers to the process of selecting the sample from a population to obtain information regarding a phenomenon in a way that ensures that the population of interest will be represented. Williams (2003) adds that appropriateness is concerned with the identification and utilization of those participants who can best inform the research according to theoretical requirements of the study, while adequacy implies that there should be adequate data to develop a full and rich description. Participants in this study were a homogeneous group of six non-specialist educators redeployed from mainstream schools. Two participants (N=2) are from the junior group, two (N=2) from the middle group and two (N=2) from the senior group. Their teaching experiences ranged from one to fifteen years. Amongst the participants one was a male and five were females. All the participants were interested in participation. Unfortunately one of the female participants withdrew as she had family crisis. I had to find replacement with the assistance of the principal. The new participant volunteered and was eager to participate. Appendix B gives a descriptive and detailed procedure of the research. Ethics are clearly indicated.

Collectively, the group of participants from whom the data was collected is referred to as the sample. The sample can be selected from a large group of persons, identified as the population (McMillan and Schumacher, 2006). According to Gay, Mills and Airasan (2006) sampling is the process of selecting a number of participants for a study in such a way that they represent the larger group from which they were selected. One reason qualitative researchers spend time in the research setting before selecting a sample is to observe and obtain information that can be generally used to select the participants whom they judge to be thoughtful, informative, articulate, and experienced with the
research topic and setting. Ellman (2004) defines purposive sampling as a process whereby the researchers rely on their experiences, ingenuity and/or previous research findings to deliberately obtain participants in such a manner that the sample obtained may be regarded as representative of the relevant population. Creswell (2012) argues that in purposeful sampling, researchers intentionally select individuals and sites to learn or understand the central phenomenon and to develop a detailed understanding that might provide useful information, help people "learn" about phenomenon and that might give voice to "silenced" people.

Based on the above information purposive sampling procedure was carried out in this study. Purposive sampling was done in order to obtain a homogenous group of participants who are non-specialist educators and have experienced the same challenges. Williams (2003) states that a purposive sample is based entirely on the judgment of the researcher, in that the sample is composed of elements which contain the most characteristics, representative or typical attributes of the population. This homogeneous group possessed the same qualities of being non-specialists and was very similar in experience and perspective. Further, Williams (2003) suggests that individual in a homogeneous group usually have a higher moral or level of motivation, and cooperate better towards achieving the set goals of interviews. Purposive sampling was used in order to gain different views from the participants about the challenges they experience teaching the intellectually impaired learners and how these challenges can be addressed. Another reason for using purposive sampling was to gain rich, valid, reliable and valuable data from the participants based on their first-hand experience.

4.6 Data collection methods

Any research project needs to identify the parameters for data collection by defining the settings (where the research will take place), the actors (the informant who will be interviewed or observed), the event (what the actors will be interviewed about or observed doing), and the process (the evolving nature of events undertaken by the actors within the setting. In addition, the data collection steps involve (a) setting the
boundaries of the study, (b) collecting information through observations, interviews, documents and visual materials, and (c) establishing the protocol for recording information (William, 2003 citing, Cloete, 1993, Creswell, 1994). As a qualitative and an interpretive researcher two techniques were employed to collect data. The researcher gathered information through in-depth phenomenological interviews to identify the participants primary challenges experienced, their perceptions and opinions about the research questions. Observations were also done to gather data on a physical setting. Audio material was also used to record participants' responses. Field notes were also taken.

4.6.1 Interviews

According to Harrell and Bradley (2009) interviews are discussions, usually one-on-one between an interviewer and an individual, meant to gather information on a specific set of topics. They further add that interviews can be used as primary data gathering method to collect information from individuals about their own practices, beliefs, or opinions. These interviews will gather factual material and data, such as descriptions of process. Qualitative interview occur when researchers ask on or more participant's general open-ended questions and record answers. In qualitative research you ask open-ended questions so that the participants can best voice their experiences unconstrained by any perspectives of the researcher or past research findings. An open-ended response to a question allows the participant to create the options for responding (Creswell, 2012). DiCicco-Bloom and Crabtree (2006) state that qualitative interviews have been categorized in a variety of ways, with many contemporary texts loosely differentiating qualitative interviews as unstructured, semi-structured and structured. Best (1981) states that with skilful interviewer, the interview is often superior to other data-gathering devices. One reason is that people are usually more willing to talk than to write.
4.6.2 Semi-structured interviews

Semi-structured interviews provided a framework for my study as the main data collection method which involved a set of pre-designed questions. Semi-structured interviews are the most widely used interviewing format for qualitative research and can occur either with an individual or in groups (DiCicco-Bloom and Crabtree, 2006). In support, Harrell and Bradley (2009) state that in semi-structured interviewing a guide is used, with questions and topics that must be covered. This kind of interview collects detailed information in a style that is somewhat conversational. Semi-structured interviews were conducted to gather more information on the challenges experienced by non-specialist educators teaching the intellectually impaired and why these challenges are experienced the way they do. Instruments used, namely interviews and observations during data collection were relevant to the research. Participants interviewed were relevant as they were redeployed from mainstream education. Most responses given during data collection answered the questions from the interview schedule. Questions were directed to the research topic which resulted in valid data being collected. Using voice recorder was of greatest success as I was able to listen and concentrate on the participant's responses without being interrupted. Participants responded to their maximum participation using their own words.

4.6.2.1 Procedure

Interviews were arranged prior at the convenience of the participants with the principal as the gatekeeper. According to Harrell et al. (2009) gatekeepers are individuals who control access to the respondent. The researcher requested an office free of interruptions and obstructions from the principal for conducting interviews. Duration of these interviews was over a period of two weeks instead of one week planned, due to emergencies that propped up from the education department which needed educator's participation. Estimated time was 45 minutes per participant. The researcher introduced
herself to the participants before the interview. A copy of an interview schedule found on Appendix E was given to the participant before enabling the participant to read interview questions for them. Protocol was used as a guide to the researcher for the research process.

Harrell et al. (2009) argue that protocol begins with an introduction. The researcher generally introduces his or herself, their organization, the purpose of the research, and the reason why the respondents have been asked to participate in the interview. The researcher clearly defined my research topic and stated the purpose for conducting the research to ensure consistency across interviews. With the key questions written on the A4 sheet, I checked batteries on my voice recording tape to ensure that they are still working. Before the interviews the researcher asked the participants whether they feel comfortable being recorded. Positive responses were received from the participants. Participants were given copies of interview schedule which is provided on Appendix C. The aim was to enable them to read the questions while being asked rather than listening to the interviewer. Another reason was that some of the participants preferred to look and to read questions themselves to gain better understanding. Room for additional questions, probing and clarification to be included during the interview was left. Information gathered was recorded using a voice recorder for later transcription. Creswell states that audiotaping of interviews provides a detailed record of interview. Field notes were also taken though not detailed. The reason was that I found it too difficult to attentively listen to the participant’s responses whilst taking notes as I did not provide myself with the note taker due to unavailability of experienced note takers. I could also not afford to pay the note taker.

According to Harrell and Bradley (2009) when the respondent is answering, the interviewer should practice “active listening” listening carefully to the respondent and evaluating whether the question has been fully answered. Interviewers should dig deeper for more information if necessary. Finally, interviewers need to stay neutral; this includes being neutral in probes, and also in verbal and non-verbal cues. Participants were given time to respond to the research questions. Their responses were recorded for later transcriptions. Time was given to the participants to add any information that
might be left during interviews. I thereafter gave my participants my contact details should they wish to add more information at a later stage. This assisted me a lot as one of the participants called me to collect written data which propped up to his mind after both interviews. I thereafter thanked and appreciated them for participating in the research sacrificing their time and energy. Creswell (2012) identified different types of interviews namely; one-on-one interviews, focus group interviews, telephone interviews and e-mail interviews. Face-to-face or individual and focus group interviews of homogeneous group was used as the best form of interviewing in this study.

4.6.2.2 Face-to-Face/Individual Interviews

According to Creswell (2012) the one-on-one interview is data collection process in which the researcher asks questions to and records answers from only one person participating in the study at that time. In addition one-on-one interviews are ideal for interviewing participants who are not hesitant to speak, who are articulate, and who can share ideas comfortably. I opted to use face-to-face interviews to enable participants who are unable to participate within a group a chance to make contributions individually without being threatened by the presence of other participants. Participants participated freely without any interruptions from other members. Information given was from the personal views and experiences not from the group influences. This information was of good quality as it is valid and reliable information from the relevant people.

4.6.2.3 Focus Group Interview

Despite my attempts to create a relaxed and non-threatening atmosphere during individual interviews, there was evident tension among some of the participants because they seemed to struggle with the language used (English) and therefore, they did not provide adequate information. To address this, it was decided to call all participants to a focus group discussion where the language used was vernacular (isiZulu). According to Harrell and Bradley (2009) focus group is dynamic group discussion used to collect information. Interviews and focus group are most likely to provide the depth of information that might be useful. Further, focus group and
interviews are also the best methods to resolve seemingly conflicting information, because the researcher has the direct opportunity to ask about the apparent conflict. The reason I used focus group is that more rich in-depth information with detailed explanations is gathered within a short time. Hennink (2007) argues that the essential purpose of focus group research is to identify a range of different views around the research topic, and to gain an understanding of the issue from the perspective of the participants themselves. He further states that it is the group discussion which enables participants to reveal their own views and opinions of the topic discussed, which may uncover views, ideas or issues unanticipated by the researcher; the discussion also generate diversity of opinions amongst participants. Participants are given an opportunity to raise their concerns and share their views collaboratively. Group members might bring up ideas that other members might not be aware of focus group assisted in collecting different views and ideas from the participants that might be left during individual interviews. This might also help to trigger their responses about the research topic and questions. Creswell (2012) argues that when conducting focus group interview, encourage all participants to talk and to take turns talking.

Conducting focus group interviews had its own challenges. According to Hennink (2007) the limitations in using focus group discussions relates to the skills required to conduct the groups, potential problems with the group dynamics and limitations related to data and analysis. For example, I had to respond and pay attention to all participants simultaneously. I was also unable to take field notes as it occasionally happened that responses were given one after the other. Participants who were slow to respond to discussion were overpowered and dominated by other members. Problem was that as a new researcher I had no relevant experience and skills of conducting research effectively. According to Creswell (2012) when focus groups are audiotaped, the transcriptionist may have difficulty discriminating among the voices of individuals in the group. Another problem conducting focus group interviews is that the researcher often has difficulty taking notes because so much is occurring.
4.6.2.4 Observations

According to Harrell et al. (2009) observation is data collection in which the researcher does not participate in the interactions. Observation protocol is a form designed by the researcher before data collection that is used for taking field notes during an observation (Creswell, 2012). Best (1981) suggests that the recording of observations should be done as soon as possible, while the details are still fresh in the mind of the observer. Class observations were done after individual and focus group interviews to gather direct data from the participants. Pre-designed observation schedule which serves as a ‘mirror’ to detect activities was used which is found in Appendix D. The purpose was to collect reliable data from the participants lived situation. Observations also played an important role in addressing research questions. The researcher wanted to gain insight and deeper understanding of the challenges experienced by non-specialist educators through observing their teaching strategies. Data which was not revealed during interviews was also gained. I also wanted to confirm if information given during interviews corresponds with what happens in class. Classroom observation on each participant was conducted for 30 minutes. Learners were taught for 15 minutes. Another 15 minutes was used for class activities. The educator moved from learner to learner doing individual attention, observing and giving assistance to those who needed help and high level of support. I took notes as a means of recording information gathered.

Like all other data collection methods, observations can also be challenging. According to Oakes (2001) “It is sometimes impossible to observe the behaviours or phenomenon of interest because it is inaccessible. The observation may give only a partial view of behaviours and further information may be needed.” Furthermore, those being observed may consciously or unconsciously change their behaviours because they are being observed. However, it was pleasing to observe that some of the challenges the participants had identified during interviews actually matched what happened in classes.
4.7 Ethical considerations

4.7.1 Permission to gain access to participants and a site

- In order to gain access to selection on the participants permission was required from the gatekeeper who is the principal of the school. Letter of request is attached on Appendix A. Creswell (2012) states that gaining access to the site or individual(s) in qualitative inquiry involves obtaining permission at different levels, such as the organization, the site, the individuals, and the campus institutional review boards. He further states that these steps include seeking permission from the board, developing a description of the project, designing an informed consent form, and having the project reviewed. A detailed description of my procedure was submitted to the principal as I had to spend time with the participants in their workplace to gather data. Creswell describes that such information includes
  - Why their site was chosen for the study;
  - What will be accomplished at the site during the research study (i.e., time and resources required by the participants and you)?
    - How much time you will spend at the site;
    - What potential there is for your presence to be disruptive?;
    - How you will use and report the results and;
    - What the individuals at the site will gain from the study (citing Bogdan & Biklen, 1998).

As a researcher in this study I attempt to explore how non-specialist educators experience challenges the way they do. In order to conduct case studies purposive sampling is done to the homogeneous group of non-specialist educators.

The following ethical measures were considered for the purpose of this study to protect the rights, needs and values of the participants. According to Williams (2005) citing (Kvale, 1996:120) the following the following information will be conveyed to the
participants: The title of the research, the aim, the method to be used, how the outcomes will be applied and published, the participants’ right to withdraw from the research at any given time and the potential advantages of the research to the researcher. Furthermore, the anonymity of respondents will be ensured, as their identities will not be related to their individual responses.

Permission to conduct a research had to be obtained from the Education Department due to prior arrangements. I had to wait for it. A school where the research was conducted was identified before going to the Department for approval. Mutual agreement between the principal of the school to be researched was made. Permission to conduct research was approved and signed by the principal and is attached as (Appendix A). Contact time and the duration of the research process was clearly stated to the principal and was agreed. Participant who were selected were given consent forms to read and sign. Williams (2003) citing Singleton, Straits and McAllister (1988:454), argue that each respondent has the right to choose when, where and in which his or her attitudes, behavior or convictions may be revealed to others. I explained prior their signing that participation was voluntary and that they can withdraw anytime should they wish to do so. I also explained that information gathered will be kept strictly confidential. Names and the name of the school will be protected and will never be revealed to anyone. Information gathered and recorded will be kept by the university for a period of five years and thereafter destroyed.

4.8 Conclusion:

In this chapter qualitative research design, methodology, paradigm and data collection methods were explored. Various ethical considerations were also discussed. Chapter five will deal with data analysis and data interpretation of the findings.
CHAPTER 5

Data Analysis and Interpretation of findings

5.1 Introduction

In this chapter, analysis and the findings of the study which set out to explore the two research questions is presented. Findings and analysis of data collected using interviews with non-specialist educators and observations was analysed and interpreted by means of coding bearing in mind its main focus on the key research questions and the purpose of the study. McMillan and Schumacher (2006) argue that qualitative data analysis is primarily an inductive process of organizing data into categories and identifying patterns (i.e. relationships) among the categories. In addition, qualitative analysis is a relatively systematic process of coding, categorizing, and interpreting data to provide explanations of a single phenomenon of interest.

5.2 Data Analysis

Gay, Mills and Airasian (2006) describe data analysis as an attempt by the researcher to summarize collected data in a dependable and accurate manner. It is the presentation of the findings of the study in a manner that is an air of undeniable. Furthermore, qualitative data analysis requires the researcher to be patient and reflective in a process that strives to make sense of multiple data sources, including field notes from observations and interviews, questionnaires, maps, pictures, and even audiotape transcripts and videotape observations. They further state that data interpretation is an attempt by the researcher to find meaning in the data and to answer the "So what?" question in terms of the implications of the study findings. They identified the following steps on data analysis:

- Becoming familiar with the data and identifying potential themes in it;
• Examining the data in-depth to provide detailed descriptions of the setting, participants, and activity (describing) and;
• Categorizing and coding pieces of data and grouping them into themes (classifying).

According to Creswell (2012) transcription is the process of converting audiotape recordings or field notes into text data. Data was collected using voice recorder as the primary source of evidence. Hennink (2007) states that verbatim transcript is an exact word-for-word record of the discussion as it is spoken on the tape-recording. Furthermore, the transcript should replicate speech as it occurs on the tape-recording, words should not be ‘tidied-up’ but rather reflect the true character of the discussion, including all the grammatical inaccuracies and confused sentences. Verbatim transcription of voice recording of each interview was done in conjunction with the interviews to ensure that information left or missed during note taking is captured accordingly. I found it difficult to transcribe data collected from voice recorder. Transcribing data was time consuming. I was able to play and listen to the voice-recorder but typing or writing the responses was a bit hectic as I was unable to capture and write the whole sentence at the same time. I had to rewind, pause and stop the recorder now and again trying to recapture the missed words. Information gathered from each participant during transcription was written separately. I made a list of topics from the participant’s responses on a separate sheet of paper. Similarities and differences were compared for duplication and overlapping meanings. Topics were thereafter clustered together on another sheet of paper. I re-examined data constructing categories which are the themes and subthemes from the list of topics. Radnor (2002) states that the topic areas are ‘holding forms’ that help you to access the data in a manageable way and provide a structure through which categories are constructed that emerge from reading the data carefully.
5.2.1 Data Reduction

According to Cohen, Manion and McMillan (2011) one of the enduring problems of qualitative data analysis is the reduction of copious amounts of written data to manageable proportions. Data reduction is a key element of qualitative analysis performed in a way that attempts to respect the quality of the qualitative data. Further, one common procedure for achieving this is content analysis, a process by which the 'many words of text are classified into much fewer categories. Gay, Mills and Airasan (2006) state that qualitative data analysis is based on induction. I started with a large set of issues and data and seek to progressively narrow them into small and important groups of key data. During data reduction voluminous amount of data collected was reduced with the main focus on responses given for the interview questions. Information given which was not related to the research topic was left. This was the most frustrating and challenging part as the participants had given more information during interviews which I had to transcribe type, reduce, code and develop themes or categories.

5.2.2 Coding

McMillan and Schumacher (2006) define coding as a descriptive name for the subject matter or topic. In support, Creswell (2012) views coding as the process of segmenting and labelling text to form descriptions and broad themes in the data. The object of the coding process is to make sense out of text data, divide it into text or image segments, label the segments, with codes, examine codes for overlap and redundancy, and collapse these codes into broad themes. Further, thus, this is an inductive process of narrowing data into few themes. Coding of each non-specialist educator was assigned, i.e. P1 signifying Participant 1. This process was done to ensure that data collected was from each participant was assigned accordingly and not confused. Another reason for coding the participants was to ensure confidentiality of the information gathered.

According to Cohen et al. (2011) a code is simply a name or labels that the researcher gives to a piece of text that contains an idea or a piece of information. Furthermore, coding enables the researcher to identify similar information. More than this, it enables
the researcher to search and retrieve the data in terms of those items that bear the same code. Coding up the data the researcher is able to detect frequencies (which codes are occurring most commonly) and patterns (which codes occur together). During data transcription, the researcher arranged data systematically i.e. according to participants' responses. The researcher interpreted and compared data gathered checking for similarities and differences on the participant's responses. The researcher again went through data repeatedly to detect frequency and overlapping data. Reading line-by-line through text the researcher used abbreviations or codes to enable identification or match of repeated or the same text gathered from various participants. Similar or frequent responses were given the same code. Themes or categories and subthemes were derived from codes.

For example:

<table>
<thead>
<tr>
<th>Text</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>My previous <strong>Teacher Training</strong> was meant for mainstream learners.</td>
<td>T TR</td>
</tr>
<tr>
<td><strong>Design Down</strong> the work to their level.</td>
<td>DD</td>
</tr>
<tr>
<td>Major challenge is the <strong>Ever-changing</strong> Curriculum.</td>
<td>E C</td>
</tr>
<tr>
<td>Difficult to design <strong>Individualized</strong> Education Program.</td>
<td>IEP</td>
</tr>
<tr>
<td><strong>Education Dept.</strong> should render <strong>Workshops</strong>, DoE, and WS</td>
<td></td>
</tr>
<tr>
<td>Provide <strong>Specialists</strong> and <strong>Therapists</strong> to all Special Schools.</td>
<td>SP, TH</td>
</tr>
</tbody>
</table>

Classroom observations will be conducted in the next paragraph and the above codes will be dealt with under the findings.
5.3 Classroom Observations

Brown and Dowling (1998) argue that an observation schedule provides, firstly, a number of categories that the researcher used to record their observations. Secondly, it includes a set of instructions describing the manner in which the schedule should be used. As non-participatory observer field notes were taken during class observation. Observation schedule was designed (Appendix F) was used as a guide to observe exactly what needed to be observed and to record down findings about the research the research questions. According to McMillan and Schumacher (2006) qualitative field observations are detailed descriptive recordings, presented as field notes, of events, people, actions, and objects in settings. Field observation is an integral part of both participant observation and in-depth interviewing. All the participants were observed. The school is divided into two categories according to the learner’s intellectual abilities. The two groups compose of educable group and prevocational group. Observations were conducted in two prevocational class and two educable classes. Prevocational groups were accommodated in one woodwork class which has equipment for the learner’s skills development. Only one educator has skills to operate those machines.

5.3.1 Prevocational Class

The first class the researcher observed was the prevocational where the learners are developed. This was the woodwork class where the learners do carpentry. This class consists of boys ranging from 18-21 years old. During the class observation learners were working as a group. Only 7 learners were in woodwork class. Equipment was not enough for the learners to work individually. Only one cutting machine was available and was used by all learners. This was an indication that there was lack of resources in the school. Woodwork teacher experiences the major challenge teaching the learners. Some of the learners were not paying attention while the other learner was busy cutting using the machine. The educator’s focus was on that learner. Other learners were not attended to. I could see that it was difficult to the educator as I was in a position of authority as Head of Department. I tried by all means not to make him feel threatened.
by my presence. This created a problem to the educator of disciplining the learners. Lack of resources as it was mentioned during interviews proved reality and validity of data collected. Recording of the findings was done. Observation did not give me enough evidence about teaching and learning and interaction between the teacher and the learners in the classroom.

Working in an environment of special schools prevocational class is specifically designed for the learners who are to exit school. Different skills are taught and developed to these learners. The major challenges I found was a shortage of equipment, lack of control and discipline from the educator's side. Learners had short concentration span. I had a challenge of forwarding the consent to the principal and also the education department about the greatest shortage of physical and material resources in special schools which hinder effective teaching and learning.

5.3.2 Senior Educable Class

The second observation was done in the senior educable class. The number of learners in this class was 15. The lesson was on numeracy where the learners were taught four basic operations. During teaching learners were just sitting and looking at the teacher. No opportunity was given to the learners to answer questions. Learners were struggling to grasp the content and concepts. It was a one-way communication. During teacher one learner was busy looking through the window waving a hand to the passers-by. Thereafter the teacher gave them activity sums on the chalkboard to complete. They were taking turns.

When the turn came for that boy he refused to do his sum. As a non-participatory observer, the researcher could not intervene or interfere with any of the learners while the lesson was being conducted. I tried to find the cause for his misbehaviour. The educator told me that from the first day of his admission to her class he said ("Miss, Angizelanga ukuzofunda lana mina uthisha uthe ngizobaza amapulangwe ngoba ngiyisidomu angikwazi ukufunda nokubhala. Uma uqhubeke nokungifundisa lezinto zakho ngizoyeka ukufunda ngiyohlala emgaqweni"). In short the boy was explaining to
the teacher that the only reason he came to a special school was to learn woodwork because he was told by the previous teachers that he was stupid, he could not read and write. He would rather leave school and become a street kid. Because of his age the teacher was unable to take him to woodwork class. She reported the matter and the boy will be promoted to that class the following year.

According to Olivier and Williams (2005) in the senior phase (12-18) career-related activities, such as handwork, painting and cooking can be introduced, as well as sexuality education. Curriculum used in mainstream schools is not relevant to special needs learners. The learners become stressed and frustrated during teaching and learning. This attitude creates major challenge to non-specialist educators. Educators themselves become frustrated. The impact is that learners frequently absent themselves from school. This was the information the researcher received from the educator. Learners enjoy doing practical school work than academics, the reason being that most of these learners did not master the 3Rs which is Reading, Writing and Arithmetic which is the reason why they were placed in special schools.

**5.3.3 Junior Group**

Observation was conducted in the junior group. Educator arranged the sitting of the learners in a semi-circle to ensure maximum participation of all learners. Wheelchair-bound learners were seated next to each other. Group work was done. The educator was together with them. Blocks with numbers were given to the learners. Instructions were given. Educator checked if the calculations were done correctly. Those whose counting was incorrect were to repeat and again given instructions. This process was repeated more than four times but other learners were quick to get the correct answers. This activity indicated that intellectually impaired learners have different levels of functional and intelligence. The educator needs to design down or to water down the work to their level of functionality. Sometimes in special schools the content taught needs to be designed down to suit the level of the learner’s intellectual ability. Often learners prefer to work in groups rather than individually. They also enjoy being with the educator when they perform class activities to get guidance and assistance.
5.4 Content Analysis

According to Olivier and Williams (2005) analysis is gathering information, determining themes, allocating information into categories and, ultimately, writing a qualitative report. Under each theme various categories and sub-categories were identified. Two themes emerged during this research. These two themes are relevant to the themes discovered by the following previous researchers, Olivier and Williams (2005) who conducted the research focusing on the topic: ‘teaching the mentally handicapped child: Challenges teachers are facing.’ Under each theme categories and sub-categories were identified based on the interview questions generated around the two research questions and the focus of this study.

5.4.1 Concept Mapping

According to Gay, Mills and Airasian (2006) concept mapping gives participants an opportunity to display their analysis of the problem and helps the researcher to determine consistencies and inconsistencies that may exist between desperate groups. Mapping in this research topic of the challenges experienced by non-specialist educators teaching the intellectually impaired is categorized according to data analysis into themes and sub-themes.

5.5 Findings: Challenges Experienced

Data collected during interview process is presented below according to the major, dominant themes and sub-themes that emerged. The following mapping represents the challenges experienced by non-specialist educators as per participant’s responses: Names that are used are not are not their real names. Pseudonyms are being used.

Table 5.1 Themes and sub-themes:

<table>
<thead>
<tr>
<th>THEMES</th>
<th>SUBTHEMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.5.1 Challenges</td>
<td>5.5.1.1 Ever changing Mainstream curriculum</td>
</tr>
</tbody>
</table>
Theme 1:

5.5.1 Challenges experienced by non-specialist educators

5.5.1.1 Ever-changing Mainstream Curriculum

Responses of the participants revealed that special schools are using the very same curriculum as mainstream schools which are of greatest challenge to them as special needs learners are unable to cope with it. Using mainstream curriculum causes lot of stress and frustration to non-specialist educators. Participants stated that special needs learners were in mainstream schools because of being unable to cope with the curriculum, repeated the grades more than once, they were then sent to special schools. The very same curriculum is again used in special schools which cause more stress to non-specialist educators. Non-specialist educators need intensive training prior their employment to special schools given the methods and techniques of teaching the intellectually impaired learners. Curriculum designers on the other hand need to involve special needs educators when designing the curriculum as these educators are hands on with the learners and understand their needs and their intellectual abilities.
Non-specialist educators need to workshops to upgrade their knowledge on how to design down and do differentiation in class so that they can be able to cope with individual special needs of all the learners.

Comments from Dumisile: (Pseudonym)

“The change…our changing curriculum is also problematic because we have moved from OBE to NC…hum NCS, currently we are in caps and through the system there hasn’t been much adaptation of the teachers into getting to know what is expected of them with regard of changing curriculum. CAPS curriculum is better but still unsuitable for special needs learners. Curriculum…specific curriculum that suites them is needed.”

Sarah further commented:

“Oh…as far as they are concerned, they have poor memory and tends to forget easily. Mainstream curriculum does not suite them as they were brought to special schools because of being unable to cope with the curriculum. Specific curriculum that will cater for their specific needs has to be designed.”

Dumisile and Sarah stressed their concern about the curriculum which seems unsuitable for special needs learners. Olivier and Williams (2005) support that age-appropriate curricula be used to facilitate the differences between the phases. In the junior phase (6-8) the focus can be more on perceptual and motor, safety, communication and socialization skills, body image and basic reading and numeracy skills. In the middle phase (9-12) the focus can be on socialization, self-sufficiency, communication, motor co-ordination and more functional academic skills, which allow greater independence. In the senior phase (12-18) career-related activities, such as handwork, painting and cooking can be introduced, as well as sexuality education.

5.5.1.2 Curriculum Adaptation

Thembi highlighted: (Pseudonym)
“Yes, curriculum adaptation, because, one I was in the foundation phase, fortunately I was teaching in the foundation for the past eighteen years, so I was able to apply that which was taught on the foundation phase, especially when it comes to grouping of learners according to their abilities. I was able to bring that curriculum and experience into a special school and be able to adapt to the new situations that were at school. This, adapt to the curriculum”

Thembi had a positive experience of teaching mainstream learners in the foundation phase. Although Thembi never taught at a special school, she tried to adapt to the new situation of teaching learners with special educational needs using her past experiences. Olivier and Williams (2005) suggest that the teacher has to plan adaptation activities and material to ensure learners’ participation.

5.5.1.3 Designing Down the curriculum

Participants responded by specifically referring to the following aspects:

Majority of the participants highlighted the same challenges with regard to teaching the mentally challenged children. The problem identified was that of designing down the curriculum to suit the learner’s level of performance.

Response from Mrs Grey: (Pseudonym)

“Okay! Mm….I had to learn to categorize my class system work into what the child can be able to …to do and be able to achieve successfully because the first thing that I learned was that the…in the main thing it’s not about passing per se but it understanding of the learning material, and that is where I had challenges at first. With the assistance of the teachers, the educators within the school I was then able to look at the work and then bring it down to their level, that is differentiation. I was then able to apply the differentiation which I was assisted by some of the senior teachers that were in the school, and thus far I’m coping well because I work with the pace of the learners.”
Special needs learners who are intellectually impaired do not have the same mentality as mainstream learners. Intellectually learners find it difficult to grasp the concepts and content taught. Olivier and Williams (2005) argue that it was confirmed in the literature that the fact that the learners do not achieve equally and instructions have to suite each child’s ability, required the teacher to do a lot of preparatory work.

5.5.1.4 Differentiation of the learners’ intellectual abilities

Non-specialist educators from mainstream schools stated that they found it difficult to adjust and adapt to different intellectual levels of intellectually impaired learners. They were told to design IEP that will cater for each learner’s needs which was something they have never done before.

Comment from Zinhle: (Pseudonym)

“They abilities are not the same, paying attention to an individual learner is time consuming. You as a teacher you are forced to do Individualized Education Program (IEP) which is difficult to use. Epileptic learners, autistic learners and so on, cannot use the same program. Sometimes the teacher is confronted with the problem of attending to the learner, who has seizure,”

Further response from Mrs Sithole (Pseudonym)

“One, it was that you have to look at the levels where the mentality....the intelligence levels at where the children were. That was the first thing that you had to look at, and then be able to make the work easier and more understandable to them.”

Westwood and Graham (2003) state that it is widely accepted that an important aspect of providing differentiated instructions is to have a range of different resources from which to select appropriately.
5.5.1.5 Teaching Methods, lack of skills and knowledge:

Participants revealed that teachers from mainstream do not understand special needs learners. Non-specialist educators are not trained to teach these learners. Methods used during teaching and learning are not suitable. Teaching strategies and approaches are above the learner’s level. Teachers leave them behind. Therefore non-specialist educators’ end up being frustrated, frequently absent themselves from school and end up being admitted in hospitals. Some leave the profession because of not coping.

Zoleka (Pseudonym) who taught in mainstream schools for 18 years reported

“That is a problem to teach special needs learners as we do not know sign language for those who are unable to speak. Our school does not have braille or assistive devices Teachers get stressed as they do not understand these learners. Some teachers frequently absent themselves from school, some are admitted in hospitals. The saddest part is that some teachers resign leaving the profession for other employment because of not coping with the stress levels of teaching special needs learners.”

An important need again that emerged from the participant’s responses was lack of knowledge about teaching the intellectually impaired learners as their (non-specialist educators) teacher training was specifically based on normal or mainstream learners. Teaching methods and learning approaches were also meant for mainstream learners’ not special needs learners. Non-specialist educators from mainstream education have no skills for teaching special needs learners.

Mrs Zulu further commented (Pseudonym)

“….and then when I taught the mainstream, firstly with the mainstream children, these are children that are not having any problems whatsoever. So, the system that I was using was what I was taught at college so it was easier for me to teach in a mainstream school without any hiccups”.

71
For Zoleka, who has taught in mainstream school for 35 years being redeployed to a special school was such a major shift, transition and a greatest challenge. Prinsloo(2001) comments that the teachers lack of necessary knowledge, skills and expertise to understand and assist these learners, causes frustrations, demotivation and serious feelings of inadequacy which disrupts effective teaching and successful learning.

5.5.1.6 Mental Age vs. Chronological Age:

The participants highlighted that the school accommodates learners ranging from 7-23 years old. The school starts from grade 1 to grade 3 which is the foundation phase. Classes combine learners who have different ages being guided by the chronological age not mental age or ability.

Comments from Mrs Sithole:(Pseudonym)

“Age, example; 12 years is supposed to be in grade 5 or 6 in mainstream school. With us the learner is a junior group because the chronological age is 12 but the mental age is 7 years. These learners stay in one grade for long. One, it was that you have to look at the levels where the mentality….. the intelligence levels at where the children were”.

Being redeployed to a special school as non-specialist educator the researcher in support of Mrs Sithole discovered that learners were supposed to stay in one grade for more than three years before being promoted to the next grade. Promotion of learners is not based on their academic achievement as these learners do not write tests and examinations but promotion is based on their chronological age.

5.5.1.7 Multiple Disabilities:

In support of the above statement Ms Hlophe (Pseudonym) stated that accommodating learners with multiple disabilities is a huge problem.
“We experience lack of teaching material or resources, no skills to teaching them, no assistive devices, not much information on how to handle autistic learner’s unusual behaviour and epileptic learners who have seizures all the time. Teaching is often disturbed. Those who are unable to speak and deaf we look at them when we teach so that they could lip read as we do not have sign language. We just continue teaching as we are supposed to teach leaving them behind”.

Ms Hlophe did ever report that classrooms accommodate learners with multiple disabilities. These are some of the aspects that results onto stress to non-specialist educators. Working with these learners makes it more difficult to teach. Olivier and William (2005) argue that individual differences are evident in classes for mentally handicapped child, even more so than in mainstream class. Some mentally handicapped children are multi-handicapped, making it even more difficult for the teacher.

5.5.2 How can these challenges be addressed?

5.5.2.1 Workshops and In-service Training:

Non-specialist educators need regular workshops and in-service trainings to equip them with knowledge and skills of teaching the intellectually impaired learners in special schools. Training these educators received was mainly focusing on mainstream children not special needs learners.

Mrs Xulu commented: (Pseudonym)

“We need more and more in-service trainings and more workshops to be conducted relevant to special needs education.”

Jobling and Moni argued that specifically, they related this to the need to devote more time to developing effective teaching approaches from working with students with special needs- “I think it should be woven into the whole course. We need more contact hours…and maybe discussions be woven into the whole course and the necessity for
specific and integrated training. Prinsloo (2001) emphasizes that during the last four years much research has been done in South Africa by education departments, teacher training colleges and the education departments of universities in order to develop models and programmes that would empower teachers with knowledge and skills to direct the transformation of schools.

5.5.2.2 Specialists:

Specialist educators and specialists people from the community, for example doctors, therapists, and nurses especially those who retired need to be involved in special schools to assist non-specialist educators educating special needs learners. Parental involvement is also of greatest importance and family members as they are the primary educators who know their children’s needs more than the educators.

Mr Sishi contends (Pseudonym)

“Special needs learners need to be taught by experienced and specialist educators. If not so, due to shortage of specialist educators non-specialist educators need to be orientated by the specialists’ educators. He further suggested that non-specialist educator must not be employed in special schools without relevant qualifications.”

Mr Sishi had a negative experience as most of educators resign because of being unable to cope teaching special needs learners who are intellectually impaired. Most special schools do not have specialist educators.

5.5.2.3 Exposure:

Non-specialist educators need to be involved and exposed to people with disabilities to get used to them. Community services need to be provided by the educators to the special need people. Education Department also needs to visit schools and monitor the progress of the intellectually impaired learners.
Thelma stated:

“Its lack of exposure, that is one because if you are not exposed to these, to the learners with special needs you will encounter problems on how to each them.” We need exposure, they must be brought to sectors with such children so that they are able to, as they are….when workshops are being conducted, they must be brought to sight where they are able to actually see the classroom and be able to even do practical’s with those children so that they are able to see whether there are some positives out of the workshops that were conducted. Most of us go above their level leaving them behind which results onto teachers being frustrated.”

Jobling and Moni (2004) argue that, we need more contact hours… and maybe discussion on doing volunteer work with disabled people on the weekend.

5.5.2.4 Bursaries

Non-specialist educators as they are not well trained about special needs education need to be given bursaries to further their education. Educators find it difficult to upgrade them as they are confronted with the responsibilities of their families. Lack of funds and their financial status is the major factor.

Nomusa (Pseudonym) highlighted the following:

“The Department of Education needs to provide bursaries to non-specialist educators so that they can upgrade and equip themselves with knowledge and skills relevant to special needs education as it were before.”

To Nomusa, it is evident there is a greatest demand of specialist educators who are willing to get more training and upgrading of their skills and knowledge to enable them to teach in special schools for the intellectually impaired. But due to the lack of funds they are unable to upgrade themselves as they also have family responsibilities.
5.5.2.5 Support:

Support from the Department of Education is their major factor. Special schools experience lack of infrastructure and human resource. Classrooms and buildings are not conducive for teaching and learning.

Wineth (Pseudonym) commented:

“Add infrastructure. Toilets need to be improved wheelchair learners. Department of Education need to take a closer look to special need education. Non-specialist educators are neglected, no benefits from the program designed. Department is very slow, need more human resource so that our school could be of inclusive in nature to accommodate every learner”.

Participants themselves expressed their feelings about the Department which does not give them full support though the Department knows exactly that they (non-specialist educators) lack skills, knowledge and training for teaching special needs learners. According to Olivier and Williams (2005) teachers need to collaborate with other professionals in identifying and making maximum use of learner’s abilities. Further they explained that special education requires collaboration and a multi-disciplinary team approach.

5.5.2.6 Stigma to special needs educators:

Olivier and Williams (2005) argue that during the interview, some of the teachers stated that there was a stigma attached to special education. These teachers reported that the stigma was obvious from the reflection of attitudes of other persons, especially colleagues in mainstream education and society in general. Furthermore, the stigma is often linked to the low academic status of the school and converted to the teachers of the school, (cited Norwich, 1990:13).

Busi supported the above statement
“Okay! Impact is stigma. Special needs educators are stigmatized. Educators from mainstream schools, learners from mainstream schools and community members look down upon us”

Working in the environment of special needs learners as non-specialist educators, we experience great difficulty when attending workshops with mainstream educators. Educators look down upon us when trying to contribute during discussion our voices is never heard. I remember at one stage when one educator said to my colleague "Kanti nawe usuthelwe upende yini?" Meaning that, "Are you also mentally retarded, as you are teaching mentally retarded children ". This comment is sometimes bringing down our self-esteem and confidence teaching special needs learners. We sometimes feel as unrecognised, useless educators. The Department of Education is also not giving us full support and recognition of the work rendered to special needs learners. When we attend workshops about the implementation of the new policies, we feel neglected as discussions are based on mainstream education only. All what is said is that “Nothing is provided for Special Schools, take these documents. Go back to your schools and design them down”

5.6 Validity and Reliability of data collected

According to Best (1981) validity and reliability are qualities that are essential to the effectiveness of any data-gathering procedure. He further explains that validity is that quality of data-gathering instrument or procedure that enables it to determine what it was designed to determine. Reliability is the quality of consistency that the instrument or procedure demonstrates over a period of time. Validity of this research was based upon carefully designed structure of selecting essential interview questions that answered and gave in-depth information relating clearly to the purpose of the research. Reliable information gathered was revealed by the consistency of participants responses which were generated from the participant’s knowledge and challenges experienced.
5.7 Limitations of the study

Limitations indicated in this study become a potential weakness in the research conducted. The researcher in this study is also a staff member which might have resulted on biasness. Participants did not feel free to voice their opinions. This study was conducted in one special school around Pietermaritzburg schools. Participants interviewed were only non-specialist educators. Other educators teaching in the same school were not interviewed which might happen that they have different or the same challenges as non-specialist educators. Participants were employed during various years and experience was not the same as some were still novice teachers.

5.8 Literature Control

According to Williams (2003) a literature control is undertaken to verify the results obtained and to compare the results of this research study with the results of other research studies previously undertaken in order to determine differences, similarities, gaps and unique contributions. William (2003) cited Marshall and Rossman (1999:43) states that literature control has a fourfold aim. Firstly, it illustrates the underlying opinions behind the research questions. Secondly, it proves that the researcher has knowledge of other related research. Thirdly, it is proof of the fact that the researcher has identified shortcomings in previous research and that his or her research will meet the requirements. Finally, the research question is refined by the literature control, by including it into longer empirical traditions. Literature reviewed in this study confirmed relevant results to the research findings. Most of the participant’s responses were similar to the information gathered by two previous researchers around the same topic. Challenges experienced by non-specialist educators were relevant to other research findings about the challenges experienced by redeployed teachers from mainstream school to special schools.
5.9 Conclusion

This chapter explores qualitative approach for data collection, data analysis and data interpretation to ensure reality and validity of data collected. Williams (2003) argues that the research took place in the natural setting of the participants and the researcher was the primary instrument in the data collection process and reporting of the findings. For this study, two prominent themes emerged from the data analysis. The first theme reveals that teaching the intellectually disabled learners is challenging by its very nature. This theme deals with the challenges experienced by non-specialist educators teaching the intellectually impaired learners. Various responses were given by the participants. The second theme stipulates the reasons for experiencing such challenge according to the participant’s views. Strengths, limitations and literature control of the study were also discussed. Conclusions and recommendations will be dealt with in the next chapter.
CHAPTER 6

Recommendations and Conclusions

6.1 Introduction

As a non-specialist educator who is also employed in a special school I commend and support all various recommendations suggested and made by the participants in this research. I would also like the Department of Education to consider them in order to effect changes that would promote effective teaching and learning of the intellectually impaired learners in all special schools. This would relieve and reduce stress of all special needs educators.

Various recommendations and suggestions were made by non-specialist educators during this research that might assist with the reduction of stress and frustrations caused by the challenges experienced teaching the intellectually impaired learners. These recommendations were related to the findings of this study.

6.2 Recommendations

This study established that learners with intellectual disabilities pose challenges to non-specialist educators teaching these learners. Non-specialist educators strived to encompass a wide range of opinions and inputs on how to overcome the challenges they experienced teaching the intellectually impaired learners. Several recommendations and suggestions were made by non-specialist educators during this research that might assist with the reduction of stress and frustrations caused by the challenges experienced teaching the intellectually impaired learners. As most of the non-specialist educators are untrained to teach in special schools for the intellectually impaired learners, they feel they are not fit to teach the intellectually impaired because the training they received in their studies was meant for normal/mainstream schools. The findings of this study confirm the view that teaching the intellectually impaired learners is challenging. The following recommendations were made by non-specialist educators.
6.2.1 Specialized training facilities

Olivier and Williams (2005) states that effective teacher training by tertiary institutions and through in-service workshops is the appropriate avenue to equip teachers with the skills and competences they need to address their task. Furthermore, effective in-service staff development workshops are vital for the development of appropriate teaching strategies. Participants interviewed supported the above statement as their major recommendation was to have more and more in-service training, seminars and regular workshops conducted to develop them. According to Mukhopadhyay, Nenty and Abosi (2012) the Department of Teacher Training and Development in collaboration with regional in-service officers should organize continuous professional development opportunities on inclusion strategies of learners with special needs. Participants indicated that their classrooms are of inclusive in nature as they incorporated learners with multiple disabilities in one class.

6.2.2 Department of Education to provide bursaries for non-specialist educators in-service training

In order to enable non-specialist educators to teach special needs learners, bursaries need to be provided by the Department of Education for educators to further and equip themselves with relevant and adequate skills. According to Williams (2003) specialized teacher training by tertiary institutions and through in-service workshops is the appropriate avenue to equip teachers with the skills and competencies they need to address their task.

6.2.3 Active support from the Department of Education

Requirement from non-specialist educators was support from the Department of Education. Departmental officials need to be brought to sectors with such children where they would be able to actually demonstrate lessons practically for non-specialist educators to observe how to work with intellectually impaired learners. Frequent visits and follow-ups need to be done by Departmental officials to observe progress.
6.2.4 Special Education teachers

Ministry of Education and Skills Development (MoESD) need to recruit Special Needs Educators who possess relevant qualifications to support learners with special needs in all special schools around the country as the majority of teachers in these skills are not well equipped to meet the demands of these learners. Training colleges and Universities need to recruit more teachers that would be trained on this specific field and relevant tertiary curriculum needs to be designed specifically for learner with special needs.

6.2.5 Teamwork and parental involvement

According to Mukhopadhyay, Nenty and Abosi (2012) it appears that there is a lack of coordination among teachers, special educators, parents, and professionals. Parent Teacher Association might play a pivotal role in strengthening the teamwork. The participants recommended that different stakeholders should be encouraged to participate in the education of special needs learners. Participants indicated minimal involvement of parents in their children’s education. School management teams need to arrange maximum participation of parent as they are the primary educators of their children who have better knowledge and understanding of how to work with their children. Olivier and Williams (2005) suggest that programs for the development of parent support, empowerment and co-operation could be facilitated through home visits (to establish contact and interaction) and parent-teacher partnership. Teachers could encourage parents to play a more active role at the school, such as painting the school or providing the school with legal advice, depending on the skills and competencies of the parent.

6.2.6 Appointment of class assistants

With regards to learners with multiple disabilities accommodated in one class, participant recommended that class assistants whom they regard as teacher aids need to be employed and placed in every class to assist the educators. Therapist and specialists need to be employed who will give support working hand-in-hand with non-
specialist educators. Retired community member who have specialties, parents of the learners could share their expertise with the educators.

6.2.7 Provision of relevant curriculum by curriculum designers

An urgent requirement from non-specialist educators is relevant curriculum for the intellectually impaired learners. Results obtained indicated that special schools for the intellectually disabled use the same curriculum as mainstream schools. These learners were assessed and were placed in special schools because they could not cope with the curriculum and have repeated the grades more than once. Apart from these challenges their major concern is the ever-changing curricula which make it difficult for them (non-specialist educators) to adapt.

According to Olivier and Williams (2005) age-appropriate curricula are suggested to facilitate the difference between the phases. According to the participants classes are grouped according to chronological age not mental age. The learner’s levels of functionality are far below their chronological age. Olivier and Williams (2005) further suggest that in the junior phase (6-9 years) the focus can be more on perceptual and motor, safety, communication and socialization skills, body image and basic reading and numeracy skills. In the middle phase (9-12 years) the focus can be on socialization, self-sufficiency, communication, motor-co-ordination and more functional academic skills, which allow greater independence. In the senior phase (12-18 years) career-related activities, such as handwork, painting and cooking can be introduced, as well as sexuality education, (citing Engelbrecht and Green, 2001). Curriculum designers need to provide special schools for the intellectually impaired learners with the curriculum that suites them (intellectually impaired) with its main focus on skills development not academics

6.2.8 Physical and material Resources

Recommendations were made to improve infrastructure within special schools as the school buildings are not conducive for wheelchair-bound learners who are both intellectually and physically disabled. Principals need to network with other stakeholders and sponsoring bodies. Human resource was also an urgent requirement to be
addressed to prevent the child from suffering. Assistive devices need to be supplied to special schools as they accommodate learners who are partially blind and hard of hearing. Specialists need to be provided to educate teachers on how to use these devices.

6.2.9 Further Research to be conducted in special schools

Recommendations from the participants were that this study focus should be conducted in all special schools around the country. Researchers should also focus on special schools not only on mainstream schools. Further research should be conducted by other researchers based on inclusion of learners with multiple disabilities on special needs classes. The main focus is on mainstream schools with the assumptions that special schools cater for learners with the same disabilities. Now that they have brought this to light intensive research needs to be conducted to reveal more various challenges experienced by educators.

6.3 Conclusion

This study explored and highlighted the recommendations were provided by non-specialist educators with regards to the major challenges they experienced teaching the intellectually impaired learners in special schools. These recommendations were made in order to fulfil the “No Child Left behind Act”, Non-specialist educators will be beneficiaries of any good action of the above recommendations that will improve their task. William (2003) argues that the teacher daily accompany the mentally handicapped child, with his many needs, problems, joy and sadness and, especially, his (or her) daily struggle at school to understand, to learn, and to develop, to finally take his place in society. As a researcher working in the same environment this study was undertaken for the sake of all the challenges encountered by non-specialist educators.
References


Ellman, B. (2004). *The experiences of teachers including learners with intellectual disabilities*. Assignment presented in partial fulfilment of the requirements for the degree of Masters of Education (Specialised Education) at the University of Stellenbosch.


Jali, L. (2009). *Experiences of students with physical impairments: Studying at Durban University of Technology*. Submitted in partial fulfilment of the academic requirements for the degree of Masters in Higher Education Centre or Higher Education Studies Faculty of Education. University of Kwa-Zulu Natal.


Special Educational Needs: http://www.garysturt.free-online.co.uk.accessed on 2012/03/09.


Appendix A

Request for Permission to Conduct Research (Principal)

39 Tritonia Road
Napierville
Pietermaritzburg
3201
9th July 2012
Contact Details: 033-3424102 (H)
0834932224(cell)

The Principal

Madam

REQUEST FOR PERMISSION TO CONDUCT RESEARCH: EKUKHANYENI SPECIAL SCHOOL.

PROJECT TITLE
TEACHING THE INTELLECTUALLY IMPAIRED: CHALLENGES EXPERIENCED BY NON-SPECIALIST EDUCATORS IN PIETERMARITZBURG SPECIAL SCHOOLS.

I am a Master’s student (Educational Psychology) under the supervision of Dr. Rosemary Kalenga. I am currently enrolled in my second year of study at the University of Kwa-Zulu Natal.

My details are as follows:
1.1 Full Names: Gladys Nokwazi Nyameka Ntombela              Title: Mrs
1.2 Student Number: 211550309
1.3 Contact Details: 033-3424102 (H) 033-3981325 (W) 0834932224 (Cell) e-mail address: 211550309@stu.ukzn.ac.za
1.4 Discipline: School of Psychology (Edgewood Campus)
1.5 Faculty: Education
1.6 Existing Qualification: B. Ed (Inclusive Education)
1.7 Proposed Qualification Project: M. Ed. (Educational Psychology)
1.8 Supervisor/ Project Leader Details:

<table>
<thead>
<tr>
<th>Supervisor</th>
<th>Tel.No.</th>
<th>Cell</th>
<th>e-mail</th>
<th>Qualifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. R. Kalenga</td>
<td>031-2607583</td>
<td>0795206042</td>
<td><a href="mailto:kalenga@ukzn.ac.za">kalenga@ukzn.ac.za</a></td>
<td>Phd.</td>
</tr>
</tbody>
</table>

The purpose of the study is to explore challenges experienced by non-specialist educators teaching the intellectually impaired learners. The intention is to find out from the educators what implications of teaching in a special school are without having prior experience or adequate skills and knowledge.

Rationale for conducting this study is that limited research has been conducted in special schools. Most researchers focus on inclusive education in mainstream schools which forms a gap. This gap exists in that there has been insufficient and a lack of investigation on how educators redeployed from mainstream schools manage to teach on inclusive special schools. Researchers have assumptions that special schools only employ specialist educators.
The study will focus on participant teachers. I will select 6 teachers i.e. 2 teachers from each phase. The teachers who will participate will do so, on a voluntary basis. Participant will be allowed to withdraw at any time should she/he wishes to do so. If they wish to participate in this study, they would have to sign informed consent to do so.

Data will be collected in the form of semi-structured interviews which is individual interviews and focus group interviews. Duration of the interviews will be 30 minutes for each educator to respond to the research questions, followed by 15 minutes classroom observation which makes 45 minutes per educator interviewed. Audio-tape will be used to record data gathered and participants will be informed about this procedure. Data collected will be stored in a secure place and upon submission of the thesis will be stored in the school of Education for a period of five years after which it will be disposed of.

Please note that confidentiality of your identity, all identifying information about the school, your educator’s names and their responses will be kept strictly confidential and anonymous.

Should you wish to contact me kindly use my contact details given above.

Your co-operation in granting permission will be greatly appreciated.

Thank you.

Yours faithfully

G.N.N. Ntombela (Mrs)       Date
Appendix B

INFORMED CONSENT DOCUMENT

RESEARCH PROJECT: MASTER’S IN EDUCATION PSYCHOLOGY DISSERTATION

PROJECT TITLE: Teaching the Intellectually Disabled: Challenges experienced by non-specialist educators in special schools for the intellectually disabled.

PROJECT AIM: To explore challenges experienced by non-specialist educators teaching the intellectually disabled learners in special schools.

RESEARCHER: G.N.N. NTOMBELA (currently an M.ED student at the University of Kwa-Zulu Natal, Edgewood Campus).

CONTACT DETAILS: 033-3424102 (H) 033-3981325 (W) 0834932224 (CELL)
211550309@stu.ukzn.ac.za (email address)

SUPERVISOR: Dr. R. KALENGA
CONTACT DETAILS: 031-2607583/ 0795206042

CHOICE OF PARTICIPANTS: I am selecting non-specialist educators redeployed from mainstream schools and employed in special schools.

CONDITIONS OF PARTICIPANTS: Should you agree to participate the following will apply:

- Participation is voluntary and you can withdraw at any time should you wish to do so without giving any reason for doing so.

- Interviews will be conducted at your workplace on one occasion.

- Interview will last for about 45 minutes. 30 minutes to respond to the research questions, 15 minutes for classroom observation.

- Confidentiality of responses and anonymity of participants will be maintained at all times.

- Data collected will not be linked to the participants.

- Audio-tape will be used during interviews to record data collected during interviews.

- All information will be kept safe and be stored at the University.

- No financial expenses will be borne by the participants.

- No psychological, physical or emotional harm will be caused by the research.
Appendix C

DECLARATION

I…………………………………………….. (Full names of participant) hereby confirm that I understand the contents and the nature of the research project. I consent to participate in the research project. I understand that I am at liberty to withdraw from the project at any time, should I so desire. Teaching the intellectually impaired: Challenges experienced by non-specialist educators in Pietermaritzburg Special Schools

Dear Educator

Please complete the following in order to confirm your willingness to participate in the research project.

I,------------------------------------------------- hereby give my informed consent to participate in the above mentioned research project.

Date :------------------

Signed:-------------------
Appendix D

INSTRUMENTS

Interview Schedule

• For how long have you been teaching special needs learners?

• Tell me about the differences you have encountered teaching in mainstream school and teaching in a special school?

• What do you experience as the major challenge in teaching the intellectually impaired learners?

• Has the previous teacher-training methods received of any use or relevance to your teaching in a special school?

• What is the impact of special needs education to other non-specialist educators?

• Apart from intellectual disability, what other challenges do you experience by accommodating learners with multiple disabilities in one class?

• How do you accommodate learners who are hard of hearing (deaf) and learners who are unable to speak (mute or dumb)?

• How can the Department of Education assist non-specialist educators to overcome the challenges they experience?

• Is there parental involvement and communication between you and the parents? If ‘NO’ Why? If ‘Yes’ How often do you involve them?

• What are some of the exciting /unpleasant experiences do you have with the learners during your teaching?

Is there anything you would like to add apart from the questions being asked?
Appendix E

Classroom observation schedule

Classroom observation is also designed on the basis of some critical research question, “How do non-specialist educators teach intellectually disabled learners who have multiple disabilities? Classroom observation form reads as follows:

Does an educator:

- Use relevant teaching methods to special needs learners?
- Communicate effectively with the learners who are hard of hearing and unable to speak.
- Ensure or practice a “No child left behind” strategy?
- Move up and the classroom to ensure maximum participation of all the learners?
- Do all the learners pay attention to the educator when teaching?
- Actively involve all the learners during teaching and learning?
- Give the learners a chance to raise their views or to ask questions during teaching and learning?
- Ensure that the learners grasp and understand the content being taught?
- Do a follow-up to check if all the learners have completed the task given?
Appendix F

3 August 2012

Mrs GNN Ntombela 211550309
School of Educational Psychology

Dear Mrs Ntombela

Protocol reference number: HSS/0617/012M
Project title: Teaching the Intellectually Impaired: Challenges experienced by non-specialist educators in Pietermaritzburg School.

Provisional approval- Expedited
This letter serves to notify you that your application in connection with the above has been approved, subject to necessary gatekeeper permissions being provided.

This approval is granted provisionally and the final approval for this project will be given once the above condition has been met. In case you have further queries/correspondence, please quote the above reference number.

Kindly submit your response to the Chair: Prof. S Collings Research Office as soon as possible

Yours faithfully

Professor Steven Collings (Chair)

cc Supervisor Dr Rosemary Kalenga
cc Academic leader Dr D Davids
cc School Admin. Mrs S Naicker