

**ADJUSTING SECONDARY TEACHER TRAINING PROGRAMMES IN
BOTSWANA TO ENSURE EFFECTIVE SUPPORT WITHIN
INCLUSIVE EDUCATION**

by

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Thesis submitted in fulfilment of the degree

PHILOSOPHIAE DOCTOR

(Psychology of Education: Inclusive Education)

in the

Department: Psychology of Education

FACULTY OF EDUCATION

at the

UNIVERSITY OF THE FREE STATE

BLOEMFONTEIN

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October 2010

DECLARATION

I, Elizabeth Badirwang Mbengwa declare that this thesis is my original and independent work, and that it has never been submitted to any other institution or faculty for degree purposes.

.....

E. B. MBENGWA

DATE:

DEDICATION

This piece of work is dedicated to all my role models - from within the family, nation and worldwide.

ACKNOWLEDGEMENTS

I humbly thank God Almighty for giving me strength and wisdom throughout the study.

This piece of work has in many ways been a collaborative effort, and I am grateful to everybody who participated, both officially and unofficially. In particular gratitude is forwarded to

- My promoter, Professor Johnnie Francis Hay, for believing in me and whole heartedly devoting his time to mentor, support and guide me throughout the research.
- Professor's secretary, Juanita, for her welcoming personality.
- My family, in particular my understanding husband . for giving me support and encouragement throughout and for babysitting the family during my absence.
- All the school heads who allowed and assisted me to conduct research at their respective schools.
- All teachers who devoted their time and completed the questionnaires . I thank you abundantly.
- All interviewees for the thesis . I gratefully thank you.
- My colleagues who were very understanding and encouraging throughout.
- Dr. Poloko Chepete, for taking me through the analysis section.
- My language editor, Ms. Dorcas Molefe.
- Doreen, for formatting the script.

ACRONYMS

BETD	Basic Education Teacher Diploma
CBM	Curriculum Based Measurement
CPD	Continuing Professional Development
CRC	Central Resource Centre
DBST	District-Based Support Team
DoE	Department of Education
DPE	Diploma in Primary Education
DSE	Department of Secondary Education
DSE	Diploma in Secondary Education
EQ	Education Queensland
ESS	Education Support Services
GTCNI	General Teaching Council Northern Ireland
ICT	Information and Communication Technology
IEP	Individualised Education Programme
ITE	Initial Teacher Education
ITS	Itinerant Teacher Service
ITT	Initial Teacher Training
LD	Learning Difficulties/Disabilities
MCE	Molepolole College of Education
MoE	Ministry of Education
NCE	National Commission on Education

NCESS	National Committee on Education Support Services
NCSNET	National Commission on Special Needs in Education and Training
NDP	National Development Plan
NGO	Non-Governmental Organisations
OAITSE	Observing and Assessing for Inclusive Teaching in School Environments
PGDE	Post-Graduate Diploma in Education
PS	Permanent Secretary
RNPE	Revised National Policy on Education
SBST	School-Based Support Team
SEN	Special Education(al) Needs
SHEEP	Student, History, Environment, Education and Performance
SITs	School Intervention Teams
SMASSE	Strengthening of Mathematics and Science in Secondary Education
SMT	Senior Management Team
SPSS	Statistical Package for Social Sciences
STA – LD	Senior Teacher Advisor . Learning Difficulties
TCE	Tonota College of Education
TP	Teaching Practice
TTA	Teacher Training Agency
TT&D	Teacher Training and Development
UNICEF	United Nations Childrens Emergency Fund

UNESCO

United Nations Educational Scientific and Cultural Organisation

WA

Western Australia

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LIST OF ADDENDA

- ADDENDUM A:** Request letter to the Permanent Secretary (PS) by the student.
- ADDENDUM B:** Request letter to the Permanent Secretary (PS) by the supervisor.
- ADDENDUM C:** Permission from PS to do research
- ADDENDUM D:** Consent letter to the Director - TT&D
- ADDENDUM E:** Consent letter to Chief Education Officers
- ADDENDUM F:** Consent letter to school heads
- ADDENDUM G:** Questionnaire to teachers
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- ADDENDUM J:** Interview schedule for knowledgeable persons

ABSTRACT

Educational support to learners has for many decades followed the traditional modernist approach predominant in special education: learners were classified and categorized according to the medical model of need. The advent of inclusive education towards the end of the twentieth century, with a totally different approach to need and support, created a mammoth challenge to teachers in inclusive classrooms and staff within education support services, especially in developing countries. A leap had to be made from the medical model to a social and eco-systemic model of need, where the focus shifted to a holistic view of support needs, whether it is located in the learner, the family, the peer group, the school or the broader society . or the interaction amongst these systems that should be addressed.

It is evident therefore that there is a need for teacher training programmes to undergo transformation that will enable ordinary or general education teachers or educators to function effectively within the inclusive education system.

This study investigated whether secondary special or inclusive education teacher training in Botswana has taken the leap towards producing %diplomates+ who can effectively support learners in their inclusive classrooms. Furthermore, the study endeavoured to propose a future model for secondary special/inclusive education teacher training. Participants in the empirical investigation included teachers from the two secondary colleges of education (Molepolole . MCE, and Tonota . TCE), teacher trainers, school heads as well as knowledgeable persons in the area of inclusive education and support. Questionnaires and interviews were used for collecting data.

International developments on inclusive education teacher training and support were considered while conducting the empirical investigation. Examples of those include: international developments on the model of special or inclusive education teacher training; teacher competencies, knowledge and skills relevant for inclusive education and support; challenges to inclusive teacher training in institutions and factors to facilitate effective teacher performance in the field.

Subsequent to studying international perspectives on special or inclusive education teacher training and investigating the status of special or inclusive education teacher training in Botswana secondary colleges, the researcher reached the conclusion that the current teacher training programme has to a large extent not taken the leap towards inclusive education teacher training. The programme would therefore not enable teachers to function effectively within the inclusive system of education. The findings included amongst others that the programme is predominantly focused on the traditional modernist approach . teachers are trained along the medical model. It was also established that there are other factors that contribute to the ineffectiveness of the programme, for example, unavailability and inadequacy of human and material resources and a lack of policy and guidelines on inclusive education and support at institutional and currently at national level (the national policy still being in progress).

On the other hand, it has to be acknowledged that the programme has some positive areas that match international developments on special or inclusive education teacher training. These areas are that the programme is studied by all trainees and it is also broad-based. Moreover, there are programme components that are of importance to successful implementation of inclusive education support, such as the Individualised Education Programmes/Plans (IEPs).

This study may be used as a basis for evaluating the current special or inclusive education teacher training programmes at the Botswana secondary colleges of education, namely MCE and TCE. It is also envisaged that the proposed teacher training model will be of great assistance during the reviewing and restructuring of these (and other international) programmes.

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CHAPTER 1

INTRODUCTION

1.1 ORIENTATION

The advent of inclusive education necessitated countries and states to restructure their education programmes so that they are fully aligned to inclusive education and support. In their effort to prepare for inclusive education, countries embarked on a number of strategies that included amongst others, teacher training. Countries and states that adopted the Salamanca Statement of 1994, which advocated for and declared that education systems should accommodate all learners within inclusive settings, saw it fit to rethink how they address this issue of inclusion within their teacher training programmes in order for teachers to acquire functional knowledge, skills and appropriate attitudes necessary for inclusive education. This is evident in countries such as Botswana, South Africa and the United Kingdom (see Dart, 2007a:10-24; Golder, Norwich & Bayliss, 2005:92; Nel, 2007:1-8; Pearson, 2007:25) respectively. In fact, teacher training seems to be one of the core strategies that would enable effective implementation of inclusive education. Nel (2007:2) is of the view that unless teachers are fully prepared . inclusive education will not be realised.

Traditionally, education systems had two sets of teachers (also referred to as educators in this research) . namely special education and ordinary/general/ %mainstream+teachers. The researcher observed that these different sets made the focus of teacher training fragmented. For instance, the first-mentioned set was trained to operate in special schools, where they served children with a specific category of disability. The latter was trained to operate in schools where there were ~~normal~~ learners. Difference in training and places of operation also made teachers to believe they have or had different responsibilities in terms of providing support to learners. It was believed that only special education teachers could support learners with ~~disabilities~~ (Mbengwa, 2006:1). Oswald (2007:146) observed that traditionally, the difference in training and job descriptions influenced teachers and related stakeholders to believe that certain learners with disabilities or special educational

needs (SEN) (hereafter referred to as barriers/challenges to learning and development, learning barriers/challenges unless only when appropriate to use) needed specialised material and equipment, specialist teachers as well as specialised segregated schools.

On the contrary, within the inclusive system of education, learners experiencing barriers to learning and development are the responsibility of all teachers . in fact every teacher is a teacher for these learners. This education system is aimed at having learners experiencing barriers to learning attending the same schools as their normalpeers. This implies that classes will consist of learners with diverse needs, who would also need appropriate support in order for them not to be excluded from the teaching and learning processes. It is evident that teachers operating under this arrangement will experience challenges, especially if they did not undergo appropriate training. Oswald (2007:141) succinctly states that %a
increasing learner diversity in schools, larger class sizes and the intensifying needs of all learners all contribute to a demanding work environment for teachers+. It is against this background that teacher training programmes should aim to prepare teachers to accept and appreciate ownership of all learners in order to successfully provide quality education and support to all learners within the inclusive system of education. This can only be possible if teachers are well equipped with relevant knowledge and skills necessary for inclusive education. From the literature, it is evident that teachers should be well vested with knowledge and skills to enable them to provide holistic and effective support within the inclusive environment. Some of the identified knowledge and skills relevant for effective implementation of inclusive education include amongst others (in no particular order), curriculum modification or adaptation, use of assistive technology, development and implementation of an IEP, collaboration, assessment and identification. Teachers should also have a positive attitude towards inclusive education.

It therefore seems important that teacher training programmes are aligned with inclusive education and support in order to realise effective implementation within the new paradigm of education. Stofile and Green (2007:59) have observed that teachers are usually held responsible for the collapse or failure of implementation - teachers are said to be incompetent, non-cooperative, not committed and even lazy. The question therefore in this study is: have countries and states embarked on

effective inclusive teacher training programmes in order for teachers not to show these factors that would otherwise jeopardise effective implementation?

It was discovered from the literature that even though there has been an introduction of teacher training programmes towards inclusive education in different countries, teachers have often raised issues that the programmes do not fully prepare them for inclusive education and concomitant support. It is on this ground that the researcher found it imperative to evaluate the current secondary special education teacher training programme in Botswana.

1.2 PROBLEM STATEMENT

The researcher, a college lecturer as from 2002 to date, has been involved with the assessment of trainees at college (microteaching) and in schools (1st and 2nd teaching practice opportunities). The observation was made that teacher trainees do not effectively provide support to learners experiencing barriers to learning and development. The focus is mostly only on their teaching subject(s). Another observation made was that not all teacher trainees have a positive attitude towards inclusive education and support. This was learnt through the comments trainees make during lecture discussions and presentations. It has also been observed that the learning materials that trainees prepare for their lessons, be it special education or subject-based presentations are mostly aimed, at the whole class and not at individuals who would often require a particular learning aid that would enable him or her to learn effectively.

This indicates that there seems to be a need to evaluate the programme on secondary teacher training to determine its appropriateness for teachers expected to provide effective support within inclusive settings.

Following the exposition of the above problem statement, research questions include the following:

- To what extent has Botswana aligned teacher training with inclusive education and support as compared to international developments?
- to what extent does the special education programme prepare trainees to function effectively and provide adequate support within the inclusive system of education?

- what factors in the teacher training institutions (colleges) influence the learning and acquisition of knowledge and skills relevant for the provision of effective and adequate support within the inclusive system of education?
- what factors in the field affect teacher effectiveness in providing support within the inclusive system of education and
- what recommendations (such as a teacher training model) could be proposed with regard to the status of teacher training within inclusive education and support in secondary teacher training institutions?

1.3 PURPOSE OF THE STUDY

The purpose of the study was to establish whether the current special education programme in secondary training institutions in Botswana, namely MCE and TCE is aligned to provide effective support within the inclusive system of education. Furthermore, the study was aimed to propose clear recommendations for teacher training for inclusive education in Botswana secondary colleges of education, should it be found that there are limitations to the current programme. The following objectives were set to guide the investigation:

- To explore and examine international policies and guidelines with regard to special or inclusive education teacher training programmes and support;
- to explore and examine policies and guidelines with regard to the special education training programmes and support in teacher training colleges in Botswana;
- to evaluate the special education programmes . on teacher effectiveness in terms of provision of support in the field and
- to propose a model for special or inclusive education teacher training and support at MCE and TCE.

1.4 SIGNIFICANCE OF THE STUDY

It is hoped that the research will enable stakeholders and all interested parties to obtain insight into the importance of teacher training for effective support within an inclusive education environment. In addition, it may serve as a motivating tool for relevant bodies in as far as reviewing of the curriculum (in particular for teacher training) is concerned to enable effective implementation of inclusive education. This study may further contribute to the successful implementation of inclusive education in Botswana (especially in junior secondary schools).

It is also believed that it will broaden the scope of knowledge of curriculum designers, related parties in the area of inclusive education, support and teacher training. It is likely to serve as a motivational tool towards further research.

Furthermore it is envisaged that the research may also encourage teachers to initiate and implement programmes or projects in trying to effectively support learners within an inclusive learning environment.

1.5 DEFINITION OF TERMS

1.5.1 INCLUSIVE EDUCATION

It is an education system in which learners have equal opportunities to maximum participation in quality education. This type of education takes into account learners' diverse needs and is aimed at providing maximum support to individual learners within the same settings that were initially meant for 'normal' learners. Within this system of education, the social as opposed to the medical model is used in order to provide appropriate and effective support to learners and systems (Engelbrecht & Green, 2001:5).

1.5.2 INCLUSIVE EDUCATION TEACHER TRAINING

Inclusive education teacher training relates to the training that equips teachers with the relevant and necessary knowledge, skills and attitudes for effective implementation of inclusive education and support. Teachers who underwent inclusive education training may function effectively in inclusive environments (class, school and or community).

1.5.3 EDUCATION SUPPORT SERVICES (ESS)

Educational support services are specialist services offered within inclusive learning environments in order to enable learners and related stakeholders maximum participation. Support services may be offered to learners, educators, parents and members of the community (NCSNET/NCESS, 1997:4).

1.5.4 BARRIERS TO LEARNING AND DEVELOPMENT

These include all learner and environmental factors that interfere with normal learning, development and maximum participation of the learner within an inclusive system of education. In this research learning barriers/challenges is also used to refer to barriers to learning and development (Mbengwa, 2006:4).

1.5.5 OUTSOURCING

Establishing and seeking both human and material resources from the community which are intended to complement the support provided by teachers and schools to enable learners and related stakeholders maximum participation.

1.6 RESEARCH DESIGN AND METHODOLOGY

1.6.1 RESEARCH APPROACH AND METHODOLOGY

A mixed-method approach was used for the study. The approach comprised of predominantly qualitative but also quantitative elements. The combined approach seems to yield better results in that one element complements the other, and adds on strengths and reduces weaknesses inherent in each of them (Gray, 2004:33; Johnson & Onwuegbuze, 2004:15; Leedy & Ormrod, 2001:102).

The combination of their distinguishing features will also add value to the research. Refer to Table 1 for further presentations on the two approaches that in combination make up the mixed-method approach.

Table 1: Distinguishing characteristics of quantitative and qualitative approaches (Leedy & Ormrod, 2001:102)

Question	Quantitative	Qualitative
What is the purpose of the research?	To explain and predict To confirm and validate To test theory	To describe and explain To explore and interpret To build theory
What is the nature of the research process?	Focused Known variables Established guidelines Static design Context free Detached view	Holistic Unknown variables Flexible guidelines Emergent design Context . bound Personal view
What are the methods of data collection?	Representative, large sample Standardized instruments	Informative, small sample Observation, interviews
What is the form of reasoning used in analysis?	Deductive analysis	Inductive analysis
How are findings communicated?	Numbers Statistics, aggregated data Formal voice, scientific style	Words Narratives, individual quotes, personal voice, literary style

Furthermore, programme evaluation design was utilised in order to evaluate the effectiveness of the current special education programme offered at secondary colleges of education.

1.6.2. PROCESS OF RESEARCH

The following steps were employed in order to achieve the objective(s) of the research:

- Review and analysis of the related literature in terms of policies and guidelines in special or inclusive education teacher training (both international and local perspectives);
- field work: questionnaires consisting of both closed and open ended questions were distributed by post and to a lesser extent by hand, to junior secondary

schools in Botswana. The questionnaires were completed by %diplomates+ of MCE and TCE (graduates as from 2004 to date), as well as school heads of the mentioned %diplomates+;

- interviews: semi-structured in-depth interviews were conducted with teacher trainers at MCE and TCE. Interviews were also conducted with knowledgeable persons in the area of inclusive education and support;
- data analysis and presentation: analysis was done on the data from the empirical investigation . and conclusions were later drawn with an effort to evaluate the programme and
- a teacher training model for inclusive education was proposed based on the conclusions made from the empirical investigation as well as the findings from the literature review.

1.6.3 SAMPLE

408 teachers from junior secondary schools in Botswana (graduates from MCE and TCE), 102 school heads (of those teachers or graduates), four teacher trainers (at MCE and TCE) and six knowledgeable persons in the area of inclusive education and support in Southern Africa formed the research sample. Four teachers from each of the secondary schools were, with the help of school heads, randomly selected. The school heads of the same schools were used. These schools were sampled by taking every second count in the complete list of Botswana junior secondary schools in all the five regional supervisory areas of the secondary department (stratified sampling employed). Teacher trainers (two from each college) were also randomly sampled by their Heads of Department while purposive and snowball sampling were used to identify six knowledgeable persons in Southern Africa in the area of study.

1.6.4 DEMARCATION OF THE STUDY

As highlighted in the sample, the research targeted 408 teachers, 102 school heads, four teacher trainers and six knowledgeable persons. The 408 teachers and 102 school heads were from the five secondary supervisory regions of Botswana (Southern, South Central, Central, Northern and Western regions). Interviewees were from secondary colleges of education, the Division of Special Education,

University of Botswana, South Africa, Lesotho (recently moved to Ireland) and Zimbabwe (currently staying in Botswana).

1.6.5 DATA COLLECTION

Prior to data collection, literature was studied with the aim to acquire more knowledge in the research area and also to be able to make concrete conclusions pertaining to the empirical investigation. Both primary and secondary sources were consulted during the review of literature. Information from literature was used during the development of the research instruments (addenda G, H, I, & J). The questionnaire for teachers and the one for school heads consisted of both open and closed questions. Interviews with knowledgeable persons were conducted in person except for one via e-mail. Contact interviews were audio-taped while the non-contact interview was only printed from the internet. Following audio-taping, the researcher prepared and transcribed notes for the purposes of data analysis.

The instruments addressed the problem statement, research questions, aims and objectives of the study.

1.6.6 DATA ANALYSIS

The researcher employed the constant comparative method of qualitative analysis and basic descriptive statistics for quantitative analysis.

1.7 FRAMEWORK

The research consisted of the following chapters:

Chapter 1: Introduction

Chapter 2: International perspectives on inclusive education, Education Support Services (ESS) and teacher training

Chapter 3: Teacher preparation for inclusive education and ESS in Botswana

Chapter 4: Research Methodology

Chapter 5: Presentation, analysis and discussion of research findings

Chapter 6: Summary of findings and proposed model

1.8 CONCLUSION

The chapter focused on the introduction to the study by presenting the orientation, problem statement, purpose of the study, significance of the study, definition of terms, research design and methodology, and framework for the study. The next chapter addresses international perspectives on inclusive education, Education Support Services (ESS) and teacher training.

CHAPTER 2

INTERNATIONAL PERSPECTIVES ON INCLUSIVE EDUCATION, EDUCATION SUPPORT SERVICES (ESS) AND TEACHER TRAINING

2.1 INTRODUCTION

Inclusive education is a global agenda that mandates countries and states to correct and change their views and philosophies on how learners experiencing barriers to learning must be supported in their learning and development. The inclusion movement gained its momentum in the 1990s. Scholars such as Alu (in Kgothule, 2004:42) are of the view that the movement originated in western countries where strong legislation and effective support made it possible to demonstrate good inclusive practices.

It was through the international conferences in Jomtien, Thailand, in 1991 and the Salamanca Statement in Spain in 1994, for instance, that people realized that there was a need to revisit special education and its efforts in trying to meet the educational needs of every learner. According to Karagiannis, Stainback and Stainback (undated) international agencies such as the United Nations Children's Emergency Fund (UNICEF), the United Nations Educational Scientific and Cultural Organisation (UNESCO), the United Nations Development Program, and the World Bank spearheaded these conferences. Furthermore, the United Nations Convention on the Rights of the Child (1989) and The Standard Rules on Equalisation of Opportunities for Persons with Disabilities (1993) took a lead in playing a central role in promoting inclusive education as part of a human rights agenda (Brandon, 2006:37; Savolainen, Kokkala & Alasuutari, 2000:10).

The main agenda of inclusive education is to increase participation of learners in the education system, where every learner is viewed as part of the community and therefore important in every aspect of the society. It compels countries and states to provide support to those in need to enable them maximum participation and development. Miles (2000:6) suggests that inclusive education is concerned with removing all barriers to learning, and with participation of all learners vulnerable to

exclusion and marginalisation. It is a strategic approach designed to facilitate learning success for all learners. It addresses the common goals of decreasing and overcoming all exclusion from the human right to education...and aims at enhancing access, participation and learning success in quality basic education for all+

It can be deduced from Miles's definition that inclusive education calls for all those concerned with the learning and support of learners experiencing learning barriers to move away from the traditional thinking of special education in which the barriers existed within the learner, and therefore did not conform to the exigencies of the regular or ordinary classroom curriculum. One way of making this possible is to focus on teacher training and support. When teachers have the necessary skills and support, inclusive education will become a reality. Swart, Engelbrecht, Eloff and Pettipher (2002:117) argue that in addition to legislation and policy, teachers must be prepared and given the necessary support, otherwise inclusive education and quality education for all will not be achieved. In fact, teachers have the responsibility to implement educational policy on inclusive education. According to Fullan (in Hay, Smith & Paulsen, 2001:214), teachers are the key role-players in determining the quality of implementation of any new education policy (which includes the new policy on inclusion)+ Wearmouth, Edwards and Richmond (2000:36) highlighted that too often change in education has failed because insufficient attention had been taken of the current practices and needs of those who are expected to put it into effect+

Knowledgeable, skilled and supported teachers should be in a position to effectively provide ESS to learners within the inclusive education system. Educators will be, to name a few, able to identify and assess learners, show positive attitudes, prepare, search for and acquire the needed materials and resources as well as work collaboratively with colleagues and parents.

It therefore seems a priority to align teacher education and ESS with inclusive education as the latter will depend primarily on teacher preparedness and adequate support. For us to be able to make this alignment possible, it is important that we first understand the transitions that special (inclusive) education, ESS, teacher training and development have undergone.

At this point, these transitions will be highlighted.

2.2 PARADIGM SHIFT IN SPECIAL /INCLUSIVE TEACHER TRAINING, SUPPORT AND DEVELOPMENT

2.2.1 THE TRADITIONAL MODERN(IST) APPROACH

The origins of this approach can be traced back to the early twentieth century. During this period (which lasted from the early to latter part of the twentieth century) special education was understood in a narrow way and this led to no or minimal support provided in the classroom to learners who experienced learning disabilities and difficulties. Learners mostly received support from special or remedial teachers in different settings, such as a special class, unit or school (Engelbrecht & Green, 2007:3).

During this period, special education service providers operated along the medical model. According to Engelbrecht and Green (2007:3) the medical model was mostly used during the first half of the twentieth century. This model aims to find out what is wrong with the learner and what could be done to cure or treat the disease or condition within the learner. Swart and Pettipher (2005:5) are also of the view that it is a model of diagnosis and treatment. Hay (2003:135) has the same argument that the medical model utilizes the patient-diagnosis-treatment sequence and paradigm, while using it as its point of departure the philosophy that a learner is equal to a patient who is in need of a correct diagnosis and the concomitant treatment to again function optimally. To further explain this model, Mbengwa (2006:30) notes that in a school situation, the social context of the learner is not considered adequately when addressing the learner's underachievement or failure. In fact, Swart and Pettipher (2005:5) air that when applying this model in the field of education, children with any type of difference or more specific disability are singled out and the origin of the difference is looked for within the learner. The professionals supporting this view tend to follow the find-what's-wrong-and-cure-it paradigm. This thinking however, can excuse educators from the responsibility of assessing the extent to which their own behaviours contribute to pupils' learning (Jordan & Stanovich in Pearson, 2007:26).

Moreover, this model is characterised by categorisation and labelling of learners with respect to their problem area despite arguments against categorization and labelling.

In addition, the model emphasised a segregated education system. The different categories and labels led to the placement of learners with %disabilities+ in special schools or classes with the understanding that they did not fit into the existing education programme. Engelbrecht and Green (2007:3) contend that learners with %disabilities+ were assessed and classified to create categories that prescribed the special education opportunities available to them. The same authors continued to assert that the special settings that the learners were accommodated at excluded them from the general education and society, with the belief that this was in their best interest. It was also pinpointed that at special schools and classes learners were exposed to special curricula and interventions by specialist staff or experts that were aimed at removing or alleviating the deficiencies from within the child (Swart & Pettipher, 2005:5).

The medical model can be linked to theories used by modernists. Modernists believe that a human being has a fixed identity (Steyn & Hay, 1999:122). This made it easy for modernists to associate mental illness with a personal disease which needed to be treated without considering other factors that may contribute to one's mental health status. According to Van Niekerk and Prins (2001:71) in the past the %psyche was most often conceptualised from within a disease-oriented paradigm. Psychologists were interested in addressing the pathology in their patients+. Furthermore, the modernists had the notion that human beings can be classified into simple medical disability diagnoses and so is the medical model. Therefore professionals who used the medical model diagnosed and categorised learners with the intention to cure or fix the problem within the learner.

Against this background, it is evident that the services provided by and training of educators and ESS professionals must have been fragmented. In fact, teachers serving in ordinary schools and those in special schools or classes did not receive the same training. This is supported by Muthukrishna (2000:71) when mentioning that in many countries special education and general education training have been organised separately, delivered through separate courses and different trainers. Practically this resulted in general/ordinary teachers and special education teachers/ESS professionals acquiring different skills. Swart and Pettipher (2005:5) maintain that those skills made a teacher or an ESS professional an expert in the field. Only these were supposedly knowledgeable in providing services to learners in

need. They continue to say that the education support professionals' role was therefore seen as indispensable and it was not possible without the professionals' intervention. On the other hand, Mittler (in Pearson, 2007:27) argues that much of the necessary expertise exists in all teachers but they lack confidence in their own competence.

Though ESS professionals were experts, their training was based on categories of disability. This meant that teachers specialised in one area of disability based on an assumption of learner deficit rather than notions of teacher efficacy. On the other hand, it has been argued that specialising in one area leads to low skill mastery in adapting the curriculum to the whole range of learners experiencing barriers to learning (Mbengwa, 2006:102). Furthering this argument, Muthukrishna (2000:66) states that with this individualistic view teacher education practices have been concerned with equipping teachers with approaches that can be used to address the problems of individual pupils. The same author is of the view that teacher education should be organised around a curriculum that confronts issues of inclusive teaching rather than the management of individual problems through an exclusive individual and special education paradigm (2000:66).

Unlike the training of special education teachers which focused on disabilities, training of ordinary or regular teachers was geared towards academic subjects such as Biology, Chemistry, English, Mathematics, History and Geography. Moreover, a very small part of the academic curriculum was devoted to general psychology, general pedagogy and teaching methodology. In addition, practical training took place in general or ordinary schools. This means the ordinary teachers were never exposed or prepared to work with learners experiencing learning challenges. This type of training and exposure made ordinary teachers to believe that they were only teachers for learners in ordinary schools who do or did not experience any form of challenges. In effect, it has been argued that the fragmented and uneven training led to the understanding that special education requires expertise different from the expertise of mainstream teachers (Engelbrecht & Green, 2007:146). The researcher strongly feels that this type of training arrangement de-motivates ordinary school teachers from supporting those learners who experience challenges during the teaching and learning processes. These are some of the reasons that necessitated a paradigm shift that involves moving away from the traditional modern(ist) approach

that addressed disabilities in a narrow perspective and, led to minimal support to those in need to an approach that extends support even to the social context. In this research that kind of approach is called the post-modern approach and will be discussed next.

2.2.2 THE POST-MODERN(IST) APPROACH

This approach informed the inclusive education or the inclusion movement that arose around the 1990s. Unlike the modern perspective, the post-modern approach perceives special education in a broader perspective and aims to provide maximum support to all who need it, not to a few categorised individuals.

The post-modern approach has its emphasis on the sociological/social ecological/ecological/eco-systemic model. The model came about as a result of the dissatisfaction identified with the medical model (Mbengwa, 2006:53). Swart and Pettipher (2005:6) assert that the sociological model became evident when normalisation was introduced in the Scandinavian countries towards the end of the 1960s. Professionals using this model are of the view that a learner cannot be detached from his environment, nor can the social context be separated from the learner (Mbengwa, 2006:54). According to Brownlee and Carrington (2000:99) the sociological model states that the construct of disability does not only exist within a person but is influenced by the conventions of social expectations and interaction. This argument is further supported by Donald, Lazarus and Lolwana (2002:42) when they contend that how we think, feel, behave and develop as persons are linked to the social structures, forces and relationships that make up our environment. On this note the researcher confidently suggests that within this model, focussing entirely on the learner and not considering all the related systems will not lead to effective provision of support and may also result in learning breakdown. Sheriden and Gutkin (2000:486) also assert that focussing almost exclusively upon the child/pathology-related factors, the medical model leads school psychologists to both ask and answer the wrong questions with regard the learner and support required. Furthermore Muthukrishna (2000:66) argues that instead of the traditional search for specialist techniques that can be used to ameliorate the learning difficulties of individual pupils, the focus must be on finding ways of creating the conditions in schools that will facilitate and support the learning of all children.

Donald et al. (2002:283) share the same sentiment with the researcher and various other scholars that a learner is not complete without his social context. In their work the scholars used Bronfenbrenner's idea of the ecological model where microsystems, mesosystems, exosystems, macrosystems and chronosystems are used to represent the ties existing between each level of the system. Donald et al. (2002:283) acknowledge that most disabilities and difficulties of learning can be explained in terms of the internal physical and psychological systems of the individual. However, all other levels of the system contribute in both contributing to, and maintaining the degree to which disabilities and difficulties are experienced.

Sheridan and Gutkin (2000:486) are also of the view that unlike in the past where school psychologists aimed to assess, diagnose and treat the internal pathologies of referred learners, the ecological theory must be used. The ecological theory should be the future of school psychology which conceptualizes human behaviour as a function of ongoing interactions between the characteristics of individuals and the multiple environments within which they function... (2000:489). Four pivotal assumptions of this theory have been suggested as follows:

- Each learner is an inseparable part of a small social system...that demands attention to systemic influences that surround the child when understanding problems and developing interventions;
- disturbance is not viewed as a disease located within the body of the learner but, rather, as discordance (a lack of balance) in the system. This requires evaluating not only variables inherent in the learner, but also environmental factors and the degree to which there is a match between the child and his or her environment;
- discordance may be defined as a disparity between an individual's abilities and the demands or expectations of the environment . failure to match between learner and system and
- the goal of any intervention is to make the system work (Apter & Conoley in Sheridan & Gutkin, 2000:489).

The theories of the post-modern approach cannot be separated from those of the post-modernists. When explaining personhood they stated that persons exist in a state of continuous construction and reconstruction, while each self contains a

multiplicity of others+ (Gergen in Steyn & Hay, 1999:122). This relates well to the social model in which a learner is only complete in the presence of the social context or contextual factors. Furthermore, Steyn and Hay (1999:122) state that post-modernists are against the theory of fixed identity of a person or a learner. Their argument, as already mentioned, lies with the fact that people are %made of multiple selves, depending on the situation we are in+. Hay (2003:135) continues to argue that the system of categorising is not helpful within inclusive education, since it is too fixed, and does not allow the notion that disability may be temporary, nor can change and improve.

The current perspectives of post-modernists on psychological well-being advocate for holistic approaches as opposed to the reductionism of the medical model. According to Van Niekerk and Prins (2001:76), the wellness of an individual should be addressed considering physiological, psychological, socio-political and spiritual sub-systems. The same authors continue to argue that the wellness of an individual cannot be detached from his cultural context. They state that %we need to realise that the cultural context in which people are socialised matters and it would be naive to assume that differences do not exist+. This shows that professionals dealing with mental well-being currently provide support in line with the social model unlike in the past when they strived to ~~remove~~ the disease from the individualq This is similar to the inclusive education system where barriers to learning are no longer perceived as a personal, but rather a social concern which therefore calls for professionals to broaden their scope of support to learners as well as systems.

It is in this line that even teacher training has to undergo a paradigm shift. In effect it should no longer be dominated by the medical-pathological model of difference and disability which, according to Oswald (2007:146), made teachers to have negative and daunting thoughts and beliefs about diverse learners, %looking at diverse learners through deficit lenses that prevented them from realising that all learners are knowledgeable and that these learners bring a wealth of expertise into the learning context+.

Within inclusive education which is premised upon the social model of disability (Gibson & Blandford, 2005:15), all teachers are teachers for learners experiencing barriers to learning and development. It follows therefore that all teachers should be

trained in special and inclusive education. Special or inclusive education must be an integral element of each and every aspect of teacher education. Guijarro (2000:50) recommends that every teacher must have basic theoretical-practical knowledge in order to provide effective support to learners. Furthermore, the researcher maintains that there are no longer compelling reasons to maintain separate systems of teacher preparation for special and ordinary teachers if all teachers are likely to meet and work with diverse and unique learners. This is supported by Savolainen, Kokkala and Alasuutari (2000:71) when stating that the rigid separation between ordinary education and special education programmes would have to be replaced by a more integrated programme.

It has already been highlighted that special training on selected categories bear little fruit in as far as effective support to learners and systems is concerned in this era. It has then been recommended that teachers must undergo broad-based training in special and inclusive education so as to enable them to address barriers holistically to enable holistic development of the learner (Mbengwa, 2006:72). The emphasis by Hay (2003:137) is that an ESS member for the 2000s should be trained in the ecosystemic perspective of special needs... He/she should have excellent skills to work with learners on an individual basis as well as a group basis. Furthermore, such a member should have outstanding skills to work with and influence adults involved in learners' lives. Social psychological knowledge and skills as well as multicultural sensitivity are, in effect, required ...+

The Salamanca Statement and Framework for Action (1994:28) also supports broad-based training. In this document it is stipulated that a non-categorical approach encompassing all types of disabilities should be developed as a common core, prior to further specialisation in one or more disability-specific areas+. Guijarro (2000:50) advises that specialist training should not be done along the medical model that has predominated to date.

It is worth noting that the medical model, though perceived to have rippling effects on the support of learners experiencing barriers, is being used by many if not all professionals. According to Swart and Pettipher (2005:6) the model is deeply ingrained into the thinking of generations of teachers, parents, professionals and legislators and is not going to change rapidly+. We should also understand that it is

necessary at some point to use this model, bearing in mind that medical conditions of learners need to be addressed. On the other hand, the social model is the appropriate and mostly preferred within the inclusive education system and ESS. It therefore seems there is still a mammoth task to clearly establish and define the very best model that would result in effective provision of support. Hay (2009:87) also has a concern on how best the two models can be merged to enable effective support within inclusive system of education. The scholar succinctly questions if it can be possible for the two paradigms to operate under one umbrella (meta-theory), whereby the medical model is incorporated into the eco-systemic model? This is an area still to be addressed through teacher training policies and programmes.

It is therefore important that individual countries and states restructure and align teacher training programmes in order for teachers to acquire the relevant and necessary knowledge and skills that will enable them to effectively use the appropriate model within the inclusive system of education. Following is a picture of the current teacher training programmes in different countries and states.

2.3 THE CURRENT INTERNATIONAL STATUS OF INCLUSIVE EDUCATION, ESS AND TEACHER TRAINING

Ordinary or general teachers play a pivotal role in relation to providing ESS to learners experiencing barriers to learning and development who have been included in ordinary schools. Unlike in the past, teachers have unprecedented responsibility towards all learners, and these learners have diverse and unique needs. Teachers need more than ever meaningful and effective training, development and support in order for them to acquire the knowledge and skills that would enable them to provide effective support especially to learners and systems requiring thus within the inclusive system of education. If they do not have the necessary knowledge and skills, teachers may revert to the traditional way of teaching . group and or teacher-centred pedagogies, which though have some good principles may not address the complex nature of learning barriers experienced.

As asserted by Fletcher, Dejud, Klingler and Mariscal (2003:409) changing the delivery of special education support to all learners experiencing barriers to learning

and development within an ordinary classroom setting represents a serious challenge for many teachers. In effect the demands of inclusive education and ESS as already explained require countries and states to restructure and align teacher training and development programmes with inclusive education. According to Van Laarhoven, Munk, Lynch, Bosma and Rouse (2007:440) the widespread practice of including learners with exceptionalities in general education classrooms, often called inclusive education, has increased expectations for general educators and has sparked discussion, debate, and structural changes in teacher preparation programs. Furthermore, it has been stated that restructuring of teacher preparation programs have been widely recommended as a means to better prepare pre-service general educators for inclusive settings (Van Laarhoven, et al., 2007:440). In furthering the argument, Avramidis and Norwich (in Winter, 2006:86) claim that teacher training and education are very important towards the success of inclusion programmes. Without a clear and consistent plan for teacher training in the educational needs of learners experiencing barriers to learning and development, attempts to include these learners in the regular schools would be too great a challenge.

Despite the increased debates on improving teacher training, development and support for realising inclusive education, there are still gaps that need to be filled to that effect. For instance it has been argued that teacher education has not kept pace with the new demands; few teachers feel adequately prepared to effectively support learners of widely diverse abilities (Covell, 2001:18). Wearmouth (in Pearson & Chambers, 2005:116) is also of the same view. The author stated that the current technicist, recipe-like approach to teacher training is viewed as ill-suited to training in relation to inclusion, since it does not recognise the complexities and uncertainties involved. Moreover, the research by Golder et al. (2005:94) showed that training institutions give teacher trainees information on inclusion but do not prepare them to address barriers to inclusive development when they get to the field. In addition, the challenges to inclusive teacher education are embedded in the modern philosophies of special education and support to children with disabilities. The serious argument presented by Oswald (2007:146) is that the previous sharp division that existed between special and ordinary education impacted directly upon inclusive teacher education. The prominent issues in this regard are as follows:

- Special education and support were understood to be the responsibility of those with expertise in the field and mainstream educators did not possess those;
- teacher preparation programmes were dominated by the medical model in which learners with disabilities were labelled as a group that cannot learn without special resources, special teacher skills and special segregated settings. In addition the medical pathology hindered ordinary teachers from realising that all learners are knowledgeable and bring with them varied and valuable experiences;
- ordinary schools preferred the referral system, especially of those learners with disabilities;
- the narrow definition of inclusive education in terms of disabilities, where the practices of special education still dominate;
- rigid and hierarchical organisational arrangements still practised in schools, and
- inability of educational policies to drive and influence the implementation of inclusive practices, even in relation to teacher educators who are to adequately prepare inclusive teachers (Oswald, 2007:145-6).

Teachers can be equipped with the necessary knowledge and skills during the initial (pre-service) and in-service (continuing professional development. CPD) training. According to Pearson and Chambers (2005:116) this type of training has been recognised as crucial for developing more inclusive practices. From the Salamanca Statement (1994:27) it is stated that adequate pre-service and in-service teacher training is essential to improve learning.

2.3.1 SPECIAL OR INCLUSIVE EDUCATION AND INITIAL (PRE-SERVICE) TEACHER TRAINING

Initial teacher training in special or inclusive education may be a critical aspect towards effective implementation of inclusive education and provision of ESS. This is based on Cook's argument (in Winter, 2006:86) that if pre-service teachers do not possess the knowledge and skills to implement inclusion appropriately, the included learners with learning barriers in their future classes will certainly have diminished opportunities to attain desired outcomes regardless of teachers' attitudes toward

inclusive reforms. As a result increased emphasis is placed on the roles and responsibilities of teacher preparation programmes to prepare new educators for teaching learners in inclusive settings (Van Laarhoven et al., 2007:440). Also, Stofile and Green (2007:58) state that it is generally accepted that teaching practices are informed and shaped by the learning theories teachers are exposed to during pre-service training and their experiences in the field. Another argument in support of pre-service special or inclusive training is that the training contributes to the broader educational experience of educators (Oswald, 2007:140).

Though there might be ripple effects of initial special or inclusive teacher training, there are also multiple advantages. Introducing special or inclusive education to teachers during pre-service may help educators to readily develop positive attitudes towards inclusive education and learners experiencing barriers to learning and development . and therefore increased chances of providing effective support. According to Blanton and Brantlinger (in Van Laarhoven et al., 2007:441) a positive attitude or disposition towards students with exceptionalities is a prerequisite for development of effective strategies in inclusive classrooms. Adding to this, Winter (2006:86) and Evans (2000:37) conclude that it would seem crucial therefore, that teachers have positive attitudes towards learners experiencing learning challenges from the onset of their careers if they are to implement programmes successfully. Abosi (2003:21) also states that pre-service training in special or inclusive education brings about changes in attitudes that are rooted in ignorance and superstition. It has been reported that there are few numbers of trained personnel in the area of special education as compared to the needs of learners and systems needing support (Mengesha, 2000:111). This negatively affects effective inclusive education practices and support in that it may be possible that significant numbers of learners are never attended to due to a shortage of human resources. Mbengwa (2006:73) argues that due to limited numbers of trained personnel, some learners remain unidentified and this leads to insufficient data on the type and categories of learning barriers. Such lack of information hinders successful provision of ESS in that a true reflection of the needed funding and type of services will not be known by bodies responsible for planning purposes. By providing pre-service special or inclusive education, this situation may be best addressed.

Pre-service special or inclusive teacher training may also lead to a preventative approach. Teachers having knowledge and skills from the beginning of their career will be able to prevent problematic situations from arising or worsening, thereby minimising barriers to learning and development. The argument by Donald et al. (2002:28) is that given the nature and extent of the barriers to learning that exist in our society, it is unrealistic to believe that we can ever be effective if we see them only as problems to be cured. Moreover, with basic theoretical-practical knowledge attained during pre-service, educators will have confidence to support learners and systems within the inclusive system of education. This will make educators not to hesitate to provide support when the need arises. According to Brownwell and Pajares (in Winter, 2006:86) ordinary educators feel more confident in their ability to teach and support learners experiencing learning and behavioural challenges when they engage in pre-service coursework relevant to the needs of learners experiencing learning challenges, curricular and instructional adaptations and behaviour management techniques.

Having outlined some of the benefits of initial special/inclusive teacher training, one may concur with the statement that says ensuring that newly qualified teachers have basic understanding of inclusive teaching, is the best investment that can be made (Mittler, 2000:137) towards successful implementation of inclusive education and provision of ESS.

Initial special or inclusive teacher training would vary from one country to another. This may be in terms of duration of study, the quantity and quality of content as well as the methodologies and pedagogies. For instance, in European countries variation was found to be in the time devoted to training, depth of knowledge covered and the opportunities provided for trainee teachers to reflect upon the issues (Golder et al., 2005:94), as well as organisation (Meijer, Soriano & Watkins, 2003:30). The causes to this variation may be due to policies, societal beliefs and needs of individual countries.

2.3.1.1 Initial special/inclusive education teacher training and support in South Africa

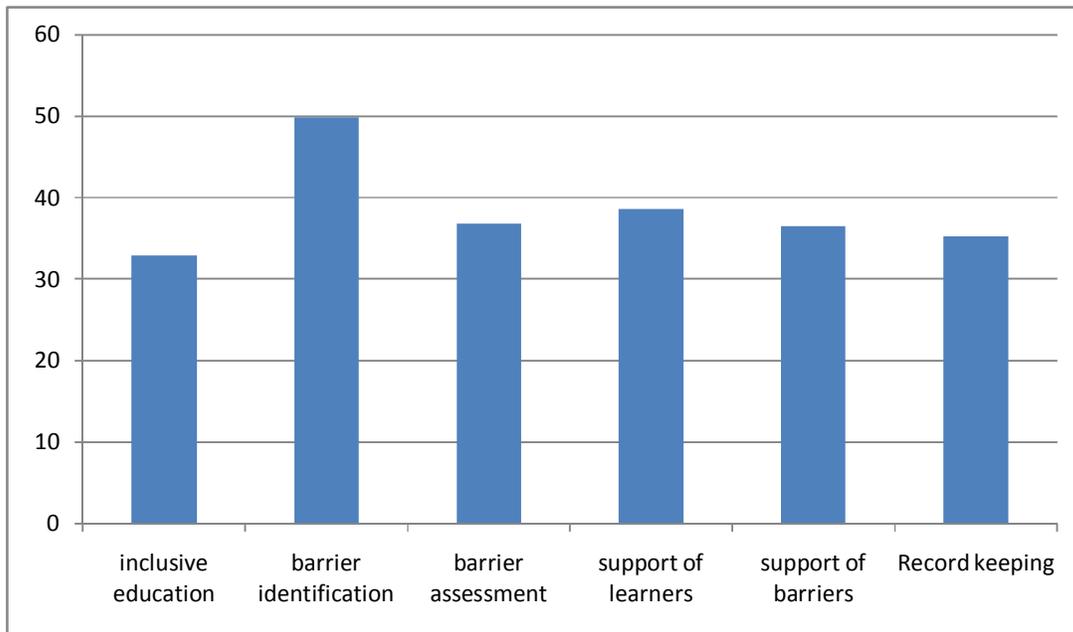
The inclusion of learners experiencing barriers to learning and development is an issue of paramount importance in South Africa just like in many African countries.

Mdikana, Ntshangase and Mayekiso (2007:130) are of the opinion that South Africa is one of the leading countries in the world in terms of the implementation of inclusive education. Government papers or documents and committees such as Norms and Standards for Teacher Training, Education White Paper 6, the Quality Education for All report by the National Commission on Special Needs in Education and Training and (NCSNET) and the National Committee on Education Support Services (NCESS), and Consultative Paper 1 on Special Education: building an inclusive education and training system, indicate the broader positive steps taken by South Africa with regard to inclusive education. However, just like in a number of countries, there are challenges experienced in South Africa towards realising an inclusive system of education and ESS. One of these challenges concerns inadequate knowledge, skills and training of teachers. That is why the country has embarked on teacher training and development. In effect, Education White Paper 6 (2001:29) states that the Ministry of Education will, through the district support teams, provide access for teachers to appropriate pre-service and in-service education and training and professional support services.

According to Mdikana et al. (2007:129) inclusive pre-service training is acknowledged in the White Paper 6. The White Paper made it clear that teachers cannot be expected to function effectively if they are not empowered to do so. On this note, the paper recommended that tertiary institutions should develop programmes for diversity learning and should start introducing programmes in inclusive education. It seems as if the recommendation was successful because Engelbrecht and Snyman, and Lomofsky and Lazarus (in Oswald, 2007:152) report that many of South Africa's higher education institutions have already made the necessary changes and incorporated the theory and practice of inclusion into the curriculum for pre-service training programmes for teachers. However, Van Laarhoven et al. (2007:440) caution that due to a number of factors such as cost, disincentives to extend duration and requirements of programmes, and both human and institutional resistance to sudden changes in the structure of education institutions and teacher preparation, programmes may never achieve large-scale adoption.

The study by Nel (2007) in the Gauteng Province signifies that pre-service training in South Africa exposes teachers to various courses that may influence successful implementation of inclusive education and support. Refer to Bar Chart 1 for the courses.

Bar Chart 1: Examples of Pre-service training in South Africa . Gauteng Province (Nel, 2007:5)



From the bar chart, it is evident that though there are various aspects of inclusive education at pre-service level the number of trainees in the Gauteng Province who get exposed to those differ from one aspect to the other. In particular there are lesser teachers trained in inclusive education. This may imply that even their confidence and competence will differ in the respective areas . when they work in the field. It may also be implied that less teachers will be equipped with knowledge and skills necessary for effective inclusive education and support, thereby negatively affecting its implementation.

Furthermore, teacher training in South Africa is expected to expose teacher trainees to competences in life skills, counselling and learning support that can be used to address barriers to learning and development (Education White Paper 6, 2001:29;

Inclusive Education Consultative Paper No 1, 1999:16). Nel (2007:3) further recommends that educators need to have knowledge and skills on:

- Various forms of extrinsic as well as intrinsic barriers;
- identifying and assessing a learner who experiences barriers to learning;
- compiling an assessment profile of a learner experiencing barriers to learning;
- collaborating with relevant role players; interviewing parents;
- implementing the intervention strategies;
- keeping record of progress;
- reflection skills;
- mobilisation and utilisation of resources available at school and
- preventing and addressing barriers to learning arising from a variety of aspects such as the content of learning programmes, the language and medium of instruction, the management and organisation of classrooms.

There are still existing gaps to be addressed in this area though. For instance, the study by Mdikana et al. (2007:127) reveals that “most teacher training programmes especially in South Africa do not prepare pre-service teachers for a teaching and learning environment that is inclusive and the *dearth of provision for SEN in South Africa is reflected in the absence of such modules in the general-teacher-training curriculum*”. In addition another study by Swart et al. (2002:183) also indicated teachers felt they were inadequately prepared during pre-service training to teach and provide support to learners experiencing barriers to learning and development. Furthermore, Nel (2007:7) is of the view that most teachers are not trained to take on inclusive education and are thus unable to respond appropriately to the diverse needs of inclusive education. It seems a lot is still to be done to align initial teacher training with inclusive education and ESS in South Africa

2.3.1.2 Initial special/inclusive education teacher training and support in Australia

Aniftos and McLuskie (undated) state that “while teacher education programs engage participants in knowledge construction and for classroom teaching and learning, it is essential that teacher training institutions provide relevant opportunities

for pre-service teachers to develop personal philosophies that promote classroom environments that are supportive of participation and achievement for all learners+

In response to the demands of inclusive education and teacher training as presented in the above statement, some institutions in Australia provide initial special or inclusive teacher training. In Queensland, for instance, policies to guide teacher training and teacher practice have been formulated. Education Queensland (EQ) sets standards for teachers and graduates seeking to enter the teaching service . and, specific attention is given to inclusive and participatory learning experiences to benefit the diverse range of learners in schooling (EQ in Aniftos & McLuskie, undated). In Western Australia (WA), it was also reported that %a major review of educational services for students with disabilities in government schools has also led to the Department of Education and Training being more focused on the need to better prepare teachers for inclusion+ (D&T in Sharma, Forlin, Loreman & Earle, 2006:82).

Initial special or inclusive training in Australia was said to be compulsory for all trainees . and specialist teacher-training programmes in special education are also offered. For example, in WA, a compulsory unit of work on educating learners experiencing barriers to learning and development is included in undergraduate teacher preparation courses (Sharma et al., 2006:82).

It seems Australia also has not yet accomplished its mission in relation to special or inclusive teacher training. For example, Sharma et al. (2006:82) reported that in Victoria, all teachers are required by law to be registered with the Victorian Institute of Teaching (VIT); however, VIT does not require registered teachers to have completed a unit in the area of special education, and not many universities offer units in special education in undergraduate programs. It was only in the last few years that some universities, such as Melbourne introduced a mandatory unit in special education, while in others, for example in Monash the programme is offered as an elective unit (Sharma et al., 2006:83).

2.3.1.3 Initial special/inclusive education teacher training and support in European countries

European countries have positively responded to inclusive education by engaging themselves in initial special or inclusive training of teachers. Countries such as the

United Kingdom (UK) have been engaged in special or inclusive teacher training for some years. It would seem in the UK the Warnock Report gave way towards the initial special or inclusive teacher training. According to Golder et al. (2005:92) the Warnock Report has long recommended that all courses of initial teacher training should contain an element of special educational need. In effect the Warnock Committee advised that those validating courses should ensure that special needs elements become a condition for approving the courses. To further strengthen the Warnock Report's recommendation, the Teacher Training Agency (TTA) was established and had the responsibility for all Initial Teacher Education (ITE). The TTA drew standards for trainee teachers to meet in order to qualify as teachers, and these included standards specific to learners with exceptional needs; it was focussed on all learners, but are particularly relevant to learners experiencing barriers to learning and development (Golder et al., 2005:92).

Furthering commitment to special or inclusive teacher training in the UK, the Department of Education and Skills has also set out the government's vision for the education of learners experiencing barriers to learning and development. The vision's mandate is about the importance of all teachers possessing skills and confidence to support learners experiencing barriers to learning and development to realise their potential (Golder et al., 2005:93). With regards to ITE, it was stipulated that the Department of Education and Skills together with TTA will collaborate to ensure that initial teacher training (ITT) provides a good foundation in core skills and knowledge of barriers to learning and development and work with higher institutions to assess the scope for developing specialist qualifications (DfES in Golder et al., 2005:93). ITT is required to equip educators with knowledge, skills and competences to:

- Understand how the learning is affected by the physical, intellectual, emotional and social development of learners;
- identify learners who have learning barriers including those who have specific learning difficulties, are very able, or do not have fluent English;
- use and implement relevant parts of the Code of Practice (Barber & Turner, 2007:33; Robertson, 1999:170);
- implement and keep records of IEPs for learners;
- know where to get help in order to give positive and targeted support and

- demonstrate that they are committed to ensuring that every pupil is given the opportunity to achieve their potential and meet the high expectations set for them (Robertson, 1999:170).

However, there are still concerns with regard to ITT in the UK. It has been reported that the training is not aligned to inclusive education in terms of quantity, quality and nature (Pearson & Chambers, 2005:116). For this particular challenge, Ainscow, Howes, Farrell and Frankham (2003:228) recommend that what is required is a process of social learning within given contexts during training. Other problems encountered in the preparation of educators included:

- A lack of time;
- poor linkage between college or university teaching and school-based practice;
- permeation approaches to SEN issues that learners have failed to find helpful;
- option-based approaches to SEN issues that are not mandatory for all learners, or do not link well to subject teaching;
- the lack of practical advice (and sometimes none) on how to meet the needs of some learners, including those with behavioural difficulties and
- school-based work in settings unsympathetic to needs of learners with learning barriers (Robertson, 1999:170).

The other prominent discovery made by Robertson (in Barber & Turner, 2007:33) in relation to initial special or inclusive teacher training in UK follows that some ITT providers have infused special educational needs into subject teaching, while others conduct special needs lectures and seminars, some which are optional and are squeezed into an already congested curriculum.

In Northern Ireland there was also a recommendation by the inspectorate that all ITE provision should contain a mandatory special or inclusive education module (Winter, 2006:87). This was based on the pre-service educators report that they acquired some knowledge and skills through special needs courses, that they believed made them better prepared to support learners experiencing learning challenges. The ITE is expected to equip teacher trainees with basic skills and knowledge in SEN, either during a four year Bachelor of Education (B Ed) degree or one-year Post Graduate

Diploma in Education (PGDE) study. The pattern or design for SEN delivery consists of a single course or series of SEN or inclusion units delivered by specialists; permeated or infused SEN made explicit in some instances but implicit in others; and some combinations of the two (Winter, 2006:87).

As per the requirement of the General Teaching Council Northern Ireland (GTCNI), the current competency for all educators should include:

- An understanding of their responsibility under the Special Educational Needs Code of Practice and know the features of the most common special needs and appropriate strategies to address these and
- employ strategies that motivate and meet the needs of all pupils, including those with special educational needs and those for whom English is not their first language (Winter, 2006:87).

Some of the material covered during ITE special or inclusive training, include behaviour and classroom management, student characteristics, assessment and evaluation, code of practice, instructional strategies, education plans, developmental differences and curriculum adaptations. These are learnt through different delivery modes of which include a combination of permeated and stand alone course, permeated, stand alone course and optional or elective SEN course (Winter, 2006:89).

More information on initial special/inclusive teacher training in European countries is presented in Table 2.

Table 2: Compulsory initial teacher training in special needs education for class teachers: duration and main characteristics (Meijer et al., 2003:31)

Country	Duration and main characteristics
Austria	The extent to which special needs information is provided to future class teachers depends on the autonomous curriculum of the various pedagogical academies in nine federal provinces. It varies from several lectures a week to special projects and additional optional training covering the whole range of inclusive pedagogy. In most academiesq practical experience, teaching in inclusive classes and co-teaching is offered.
Belgium	Initial training includes general information and basic knowledge on special needs education. Practical training is to be followed during the last year. At the end of the initial training it is expected that teachers have the necessary competencies to work in a special school or the necessary knowledge and skills to deal with pupils included in mainstream education.
Cyprus	Initial training is a four-year university course. It offers one compulsory and one optional module on special needs education that provide basic information on special needs and educational approaches, as a complement to the other initial training courses. Staff is encouraged to attend these courses and seminars to enrich their knowledge.
Czech Republic	For primary teachers, depending on university, initial training on special needs education is offered to all class teachers; it usually corresponds to 2-3 hours of lectures per week for 1-2 semesters. Training includes general information on disabilities. Initial training on special needs is not common for lower and upper secondary teachers; 10-semester fully specialist university studies providing professional competencies in special needs education are recognised as well. Graduates also work as class teachers.
Denmark	Initial training corresponds to a course of 40 hours. Usually this is optional. The aim is to acquire specialist knowledge related to special needs, preventing and remedying difficulties arising from those needs.
England and Wales	Within the programme there are competence elements relating to special educational needs. Standards for Qualified Teacher Status set out minimum requirements for special educational needs training. These include knowing the broad procedures to be followed for identifying, assessing and meeting special educational needs in mainstream education.
Finland	Pre-primary class teachers have 1 1/2-2 study weeks, depending on university. That includes lectures, practical work and visiting schools. In lower secondary education, teachers follow one study week, mainly through lectures. Optional training proposed, depending on university, may include 15 study weeks for pre-primary and primary teachers and 1-2 study weeks for lower secondary and upper secondary teachers. Depending on university, it is possible to select special needs education as a major subject during the initial teacher training, acquiring the specialist teacher diploma directly.
France	Initial training corresponds to training modules of 42 hours. They include information on teaching pupils presenting disabilities, illness or other problems.
Germany	Two possibilities are offered to the future teachers: (1) specialist training can take the form of initial training of 4.5 years, or 9 semesters, at the university plus two years of practical training at school, or (2) all class teachers acquire complete elements on special educational needs within their initial training programme.
Greece	Initial training includes courses on special needs education and learning difficulties and visits to special schools. No central ministry indications and or regulations exist on initial teacher training curriculum, because every university is independent as far as a curriculum is concerned. A new department has been established at the university of Thessaly, in Vols, training specialist teachers.
Iceland	Initial training corresponds to a course of 30 hours for one year.
Ireland	Initial training includes a 30-hour general module and a minimum two week practical

	training in special educational settings. The focus is on observation and assessment.
Italy	Initial training provides general information on special educational needs to all teachers.
Lithuania	Initial teacher training provides 2-4 credits on special needs education at pedagogical universities. After graduating from secondary school, students can start studying special needs education at Bachelor level, followed by a Master's level at the university.
Luxembourg	Initial teacher training includes information on special needs education provided to all pre-primary and primary teachers. It includes practical training for one year during the second training year.
Netherlands	Special educational needs are featured throughout the general training programme. Training includes an introduction to education for pupils with special needs.
Norway	Initial teacher training is included in the regular pedagogic subjects for half a year. All teachers receive introductory courses in special needs education and support services.
Portugal	Initial teacher training corresponds to a one-year 60-hour course and includes general information on pupil diversity, special needs, curricula adaptation and work with parents.
Slovakia	Initial teacher training is 10 semesters of full . or part-time studies providing professional competences. Specialist training is proposed as a form of initial training. An admission procedure needs to be passed.
Spain	Two possibilities are offered to the future teachers: (10 specialist training can take the form of initial training of three years, or (20 all teachers follow one subject of 80 hours on learning difficulties and special needs. Every university has the freedom to set up its own programme but taking into account the minimum number of hours referred to above. This includes both academic and theoretical issues and teaching practice.
Sweden	Special needs education is a prioritised area in initial teacher education and is included in the general education courses. In addition, students can choose special course. Length and content of these courses (as for all courses) vary between the different higher education institutions.
Switzerland	Initial teacher training needs to compromise, among other elements, educational science courses including aspects of special needs education. Teacher training requires a 3-year study on International Standard Classification of Education at level 5. Details vary in different training institutions.

In conclusion, it is evident that in many countries there are positive aspects in relation to initial special or inclusive education teacher training. However, there is still a lot to be done in order to align the training with inclusive education and ESS. Though countries are engaged in the initial training of educators, there have been cases where educators still felt inadequate to support learners and systems within the inclusive system of education even after doing special or inclusive courses during their initial training. Countries and states seem not to have a strong, clear and focused stand with regard to initial special or inclusive teacher training. It is evident from literature that institutions within the same countries and states run the training differently. In some institutions for instance, the special or inclusive courses are offered on an elective basis while in others they are compulsory, either infused or not in the general curriculum. In other institutions educators are not compelled to have at

least an element of special or inclusive education before qualifying as teachers. This leads to inequalities in teacher skills and competencies.

Countries and states may address these inequalities through in-service training CPD or supplementary training, to enable educators to better provide support within the inclusive system of education.

2.3.2 SPECIAL/INCLUSIVE EDUCATION AND IN-SERVICE TEACHER TRAINING

In-service training in special or inclusive education is as important as initial training. It contributes to the successful implementation and provision of inclusive education and ESS. Like it was mentioned earlier, some educators still lack appropriate skills even after having the chance to do special or inclusive courses or modules during their initial training. In Australia for example, this insufficiency of training to prepare educators to effectively include and support learners experiencing barriers to learning and development in ordinary schools has been repeatedly seen as a barrier to establishing more inclusive settings (Sharma et al., 2006:82). In-service training will assist the same educators to acquire the necessary knowledge and skills on special or inclusive education and will later be in a better position to support those in need. Christopher and Sachs (2004:4) are of the view that in-service takes place in contexts of raising standards of teaching where pre-service programmes are inadequate to produce a sufficient supply of competent novice teachers.

It is also worth noting that the field of special or inclusive education grows all the time and this means professional development has to keep up with these tremendous developments in order for educators to function effectively. Myreddi and Narayan (1999:6) asserted that periodic in-service training programmes for teaching professionals to keep them abreast of the developments world-wide and to equip them to face the challenges of changing trends is of paramount importance. If educators do not receive any form of in-service training, they are likely to be locked into self-regarding idiosyncrasy, where they cling too much to their own styles of teaching and support which may necessarily not be aligned with current support within inclusive education.

In-service special or inclusive teacher training is important especially because in the past, ordinary school teachers were not trained in the area of special education and have since been required to teach and support learners experiencing barriers to learning and development. In South Africa for instance, in the past teacher education programmes were not the same for ordinary and special education educators. This means they provided different services and to different learners in different settings. In effect ordinary school educators were not required, and therefore not trained, to respond to learner diversity and are currently teaching without the necessary experience, skills and dispositions to handle diverse learning needs in their classrooms+ (Engelbrecht et al. in Oswald, 2007:153). It is true that these educators experienced great challenges when trying to cater for learners experiencing barriers in general classrooms and this may result in resistance from teachers and the same teachers may not be willing to include such learners in their classrooms. Winter (2006:85) found that in most cases resistance surfaces due to lack of skills necessary to teach learners with learning barriers. Mutepfa and Mpofu (2007:8) reported that in Zimbabwe there are cases where learners with significant learning barriers have been turned away from schools because educators felt they are untrained and ill-equipped to teach them.

It is through in-service training that these educators will learn about special education and therefore acquire the knowledge and skills necessary for inclusive education and as such they will be motivated to work with those learners. When motivated to include learners experiencing barriers to learning and development in their classes, they find it so rewarding that they often work longer hours. They no longer see the same learners as a burden (IDDC seminar on inclusive education, 1998:11). Also, Gyimah, Sugden and Pearson (2008:71) argue that educators lack of interest in or support for any educational policy has serious repercussions, especially for those for whom it is intended. They continue to state that the unwillingness of educators to meet the needs of learners due to the stressful nature of the task may lead to exclusion of the learner. In this case general educators may be apathetic to the academic needs of the children with SEN and may think they belong elsewhere, thereby separating children into neat compartments of mine and yours instead of seeing that the children fall into the category of ours (Wood in Gyimah et al., 2008:72). The research on inclusion in Vietnam by Villa, Tac, Muc,

Ryan, Thuy, Well and Thousand (2003:24) revealed that in-service training for teachers brought positive changes towards the inclusion of learners experiencing barriers to learning and development. The changes noted were that the educators moved away from an exclusively didactic approach to cooperative group work for learners, and educators also improved their sensitivity to learners' individual needs.

The other reason for in-service special or inclusive education teacher training is to address the problem of an insufficient number of knowledgeable and skilled personnel in the field of special or inclusive education. This has been and is still a big challenge in relation to successful implementation of inclusive education and provision of ESS. The glaring shortage of qualified personnel has highly unfortunate consequences for the quality of learning and support in an inclusive environment. Moreover, the professionals of the modern years were mostly trained in one category of disability as it was called by then. However, it has been argued that a single disability teacher training is not economically viable since appointing special educators, for small groups of four to five children with single disabilities would be very expensive. Hence it is necessary to have a teacher training programme which enables the teacher to manage all disabilities (Myredden & Narayan, 1999:5).

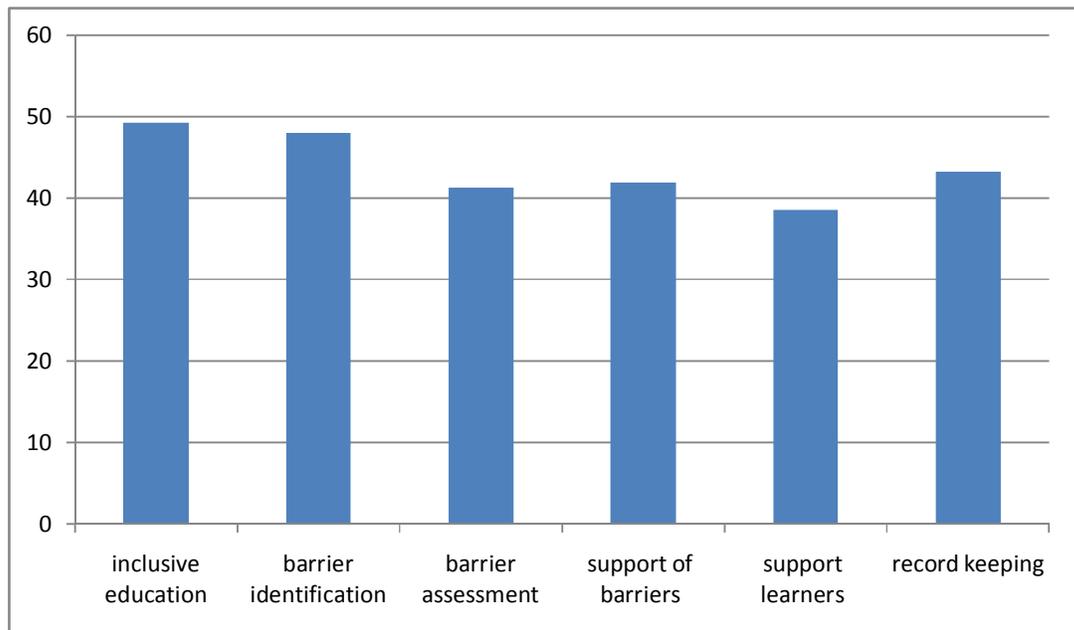
In-service training takes various forms. The training may be through short courses, long courses, seminars and workshops. In certain countries, for example European countries, supplementary training is considered to be part of in-service training. The advice given is that in-service training must be centred on the school as a whole, because the training of isolated teachers does not achieve significant changes in the school culture (Guijarro, 2000:50). In South Africa, short workshops away from the workplace have been discredited, for they do not seem to be the answer to educators' sustained and meaningful professional development (Oswald, 2007:154). As a result, the NCSNET/NCESS commission suggested that the focus of capacity building for the development of an inclusive education and training system should be on developing the self-sufficiency of teachers within the context of the school where they are presently working (DoE in Oswald, 2007:154). Another important point highlighted was that educators themselves need to take stock of their competences and effectiveness and later seek the necessary improvements as part of a continuing process of professional development. They should also have the responsibility to do

what is best for learners as they get involved in the teacher-learning process that is designed to meet the needs of the learner.

Literature shows that many countries are involved with inclusive education and in-service training of educators. In Zimbabwe for instance, Mutepfa and Mpofu (2007:7) state that the special needs education certification is typically attained after achieving the regular teacher education qualification. The emphasis is on pedagogy and learner development, including the learning needs of exceptional learners, broadly defined. Furthermore, both general and special needs educators have training in inclusive education practices. In South Africa, Nel (2007) carried out research entitled *'The training needs of South African in-service teachers regarding the support of learners experiencing barriers to learning'*. The results showed that in-service training was in the area of inclusive education, barrier identification, barrier assessment, support of barriers, support of learners, record keeping, profile compilation, referral procedures, multidisciplinary collaboration, interviewing and the support system (See Bar Chart 2).

Furthermore, initiatives for in-service training are spearheaded by the national and provincial education departments, very often in collaboration with foreign funding organisations, NGOs and higher education institutions, to prepare in-service educators for inclusive settings and to develop relevant resource material (Lomofsky & Lazarus cited in Oswald, 2007:153). Problems identified with in-service training in South Africa, however, are that (a) in-service programmes for educators seem to be focused on a deficit model approach (Reddy in Oswald, 2007:153); (b) there is a mismatch between what is offered in training and the educators' needs; (c) the training period is short . and generally the training is presented in workshop formats of short duration and ignore both personal and professional needs of teachers (Engelbrecht et al. in Oswald, 2007:153-4).

Bar Chart 2: In-service training received in South Africa . Gauteng Province (Nel, 2007:6)



From Bar Chart 2, it is evident that teachers in the Gauteng Province are exposed to different aspects that may influence effective implementation of inclusive education and support. In particular, there seems to be more teachers who are in-serviced in inclusive education, which therefore may suggest that they will perform much better in the area.

In Europe, all countries were said to provide in-service training for educators and mainly on a voluntary basis. The training is provided in schools, resource centres or training institutions. In-service training in these countries is highly recommended and a useful strategy of support for class teachers working with learners experiencing barriers to learning included in the general education (Meijer et al., 2003:36). Supplementary training in European countries also helps educators to acquire knowledge and skills to support learners in inclusive system of education. It follows immediately after initial training, but in other countries educators are required to have served in the ordinary system of education before for a certain period of time (Meijer et al., 2003:33). Examples of supplementary training in European countries are shown in Table 3.

Table 3: Supplementary training for teachers in Europe (Meijer et al., 2003:33)

Country	Pre-requisites, basis, description of the type of training
Austria	Professional experience is not always required. Supplementary training is not really compulsory, but teachers with additional qualifications in the field of special needs are given employment priority. Supplementary training includes specific qualifications required to work with pupils with visual, hearing, physical or speech impairments and severe behaviour problems, and with pupils in hospitals.
Belgium	Professional experience is not required. Supplementary training is optional and lasts from 1 to 2 years or 240 hours of general training and 420 hours of practice in school (spread across a larger number of years). It includes general knowledge about teaching techniques, curricular adaptations and specific knowledge on particular disabilities (visual, aural, intellectual) and techniques, such as sign language. Even it is optional, most special schools want their staff to undertake such training during their first working years.
Cyprus	Professional experience is not required. No supplementary training programme is available in Cyprus (those wishing to specialise can attend courses at universities outside Cyprus). However, all educators are encouraged to attend local optional training seminars and courses dealing with special needs education (they do not lead to postgraduate qualifications).
Czech Republic	Professional experience is not required. Supplementary training is compulsory and varies from 2 to 3 years. Specialist courses include general and specific subjects and specific training for one type of disability according to the teacher's choice, such as learning disabilities, language disorders.
Denmark	Professional experience is required: 2 years working at school for diploma studies and 5 years for Master level studies. Professional experience is not required for short courses. It is optional and varies from 40 hours to 1 and 1/2 years. It includes general and specific subjects concerning special needs education.
England and Wales	One year of professional experience is required before specialist training. Specific training is compulsory for specialist teachers of the deaf and those specialising in working with visually impaired pupils. All other professional development within special needs education is voluntary though many practitioners working in this area will follow accredited courses, often at degree or diploma level (such as in relation to autistic spectrum disorders or specific learning difficulties) and almost all will attend short, non-accredited courses training.
Finland	Professional experience is not required, but work experience is used as an indicator for selection of studies. Supplementary training is compulsory and lasts from 1 to 1 and 1/2 years (35 study weeks). It applies to all teachers from pre-school to upper secondary levels. It includes specific training for special class teachers dealing with pupils presenting visual, hearing, physical or mental impairments. Compulsory general training is provided for support teachers.
France	Professional experience is not required but recommended for the specialist teacher to obtain the certificate of aptitude for educational adaptation and inclusive activities. Supplementary training is optional, lasts for 2 years and includes one of seven options relating to different types of pupils' difficulties. It includes general and specific training according to different types of disabilities and covers theoretical and practical training.
Germany	Two years of professional experience is required. Supplementary training is compulsory and lasts for two years. It includes specific training in two main subjects: learning difficulties and intellectual disabilities; visual impairment, behaviour problems and others.
Greece	Five years of professional experience is required. Supplementary training is compulsory and lasts for 2 years and is aimed at primary teachers. An admission examination is required and includes training on learning difficulties. Specific training on visual, hearing and physical impairments is optional. Secondary teachers may participate in 40-hour training sessions, providing them with general information on special needs education.

Iceland	Two years of professional experience is required. Supplementary training is optional and varies from 1 to 2 years. It covers general training on learning difficulties and National Curriculum adaptation. Further optional training is offered in specific areas, such as visual and hearing impairments.
Ireland	Two to three years of professional experience are required. Supplementary training is optional and lasts for one year. It includes general training for resource teachers or those working in special classes. There is general training on learning difficulties for support teachers and specific training for visiting teachers or those working with hearing impaired pupils. A one-year course is being implemented addressed to special classes and resource teachers at secondary level.
Italy	Professional experience is not required. Specialist teachers need to follow a one-year compulsory course at university which covers specific theoretical and practical training. Theoretical training is delivered at university and practical training is attended in local schools. One optional additional semester is offered for teachers working with deaf or blind pupils or for any further specialisation.
Lithuania	Professional experience is not always required. Specialist education and training regarding a type of disability at university level is available. An additional specialisation in special needs education is available for any in-service teacher as well.
Luxembourg	Professional experience is not always required. Supplementary training is optional and lasts for one year. It includes specific compulsory training according to type of disability.
Netherlands	Professional experience is recommended but not required. Supplementary training is optional, lasts for 2 years part-time and includes theoretical and practical training targeted at different categories of impairments and different tasks or jobs in SEN education. In practice supplementary training is required for teachers working in special schools; they have a slightly higher salary and are considered more qualified in the labour market.
Norway	Supplementary training is optional and varies from 1 to 4 years full-time or part-time. It is addressed to primary and secondary teachers. It includes general and specific training on special needs education work, prevention and advice.
Poland	Professional experience is not required. Supplementary training is broad and includes a 5-year Masters degree for teachers working in special needs education; 3 semesters of post-graduate studies addressed to teachers who have graduated from a Masters degree course; its main aim is to prepare them for teaching. The third option is two semester studies offered to Masters degree holders (with preparation for teaching) who intend to work or already work in schools where pupils with disabilities are partially or fully included with the others.
Portugal	Two yearsq professional experience is required. Supplementary training is compulsory, lasts 2 years and includes general and specific training, theoretical and practical training. Several areas of specialist training are offered. It is compulsory for all specialist teachers.
Slovakia	Professional experience is not required. An admission procedure needs to be passed in order to proceed with supplementary training which lasts 4 semesters full-time or part time. Specific training of any type of disability is provided for teachers working in special schools, including pedagogical and professional competences. The same applies for teachers working in mainstream schools with included pupils.
Spain	Professional experience is not required as a supplementary training can be part of initial training education. Supplementary training is aimed at primary education teachers working in special settings or mainstream schools. It is compulsory and lasts for 3 years. It includes general training on learning difficulties and disabilities. Specific training is also provided for teachers working with hearing impaired pupils
Sweden	Professional experience is not required. Special needs education is included in the initial training of teachers. Supplementary training includes practical knowledge for teaching pupils with specific special needs as well as strategies for support teachers. In-service training is compulsory for all teachers.
Switzerland	Professional experience is not required. Supplementary training is compulsory and lasts 2 years full-time (or more, part-time). A specialisation or additional training is recommended, especially for visual and hearing impairments.

In-service special or inclusive education teacher training is mostly recommended and provided in a significant number of countries. Just like the initial training, the in-service training varies from country to country in terms of quantity, quality and nature. The other factor identified in relation to in-service training is that it does not fully equip educators with the necessary knowledge and skills. For example, in South Africa there was a concern that the current in-service training does not always meet teachers' needs ... Furthermore, there appears to be a negative attitude towards in-service training, which does not always bring about the desired change+ (Swart et al., 2002:183).

Generally, however, it has been discovered that special or inclusive teacher training is very important in as far as inclusive education, ESS and teacher training is concerned. If teachers do not have quality training in the area, there will not be effective implementation of inclusive education and provision of ESS. Quality training means that teacher training programmes should equip teachers with the knowledge and skills that will enable them to effectively provide support within an inclusive system of education. Some of the knowledge and skills necessary for effective inclusive education and support will be discussed next.

2.4 KNOWLEDGE AND SKILLS FOR EFFECTIVE INCLUSIVE EDUCATION AND SUPPORT

Within the inclusive education system where the social model is used, teachers are expected to cope with large class sizes, as well as learners with diverse and unique needs. The most demanding and challenging task is to cater for learners with high support needs who during the modern era were taught in segregated settings. The impact of all these, necessitates that teachers must be very knowledgeable and skilled and be adaptable to ever-changing factors and conditions in the inclusive classroom. If teachers lack the necessary knowledge and skills, they are likely to get frustrated and discouraged (Prinsloo, 2001:346) to continue implementing inclusive education and providing effective support services. Teachers may conclude that the implementation of inclusive education and provision of ESS is not practical. This situation will then negatively affect the learning and development of learners experiencing barriers to learning and development.

The Salamanca Statement of Framework for Action (1994:27) identifies some of the knowledge and skills required for teachers to be effective providers of ESS within the inclusive system of education. These include assessment, adaptation of curriculum content, utilisation of technology, and planning and implementing IEPs. In addition teachers need to have knowledge and skills on collaboration (Engelbrecht & Green, 2001:41).

2.4.1 ASSESSMENT

The importance of effective assessment within an inclusive system of education cannot be over-emphasised. During the modern era, assessment was done for at least two purposes . to detect %disability+ within an individual learner, and treat or correct it (Mbengwa, 2006:73) or even prescribe placement for that learner. In a classroom situation assessment focussed on the test scores which indicated a lower or a higher grade, followed by labelling the learner either as slow or a high achiever. Landsberg et al. (2005:56) argue that this system did not provide sufficient information for learning support. Within the inclusive system of education assessment is done for the purpose of providing effective support to learners . and other levels of the system, if need be. This means the teacher should be able to produce a comprehensive assessment that will take into account the learner's cognitive, emotional, social and perceptual ability to motivate themselves and their relation to the social context (Eklindh, 2000:106). It is an undisputable truth that for a teacher to be able to do this type of assessment, he should be able to employ different assessment techniques and strategies. If effectively done, the assessment will communicate to the teacher, the learner and related stakeholders the strengths and weaknesses of the learner as well as the interventions and support required for effective learning and development.

The demands of assessment within the inclusive system of education signify that teachers need training and support in order for them to function effectively. Kilpatrick and O'Neil (2006:89) quoted one teacher who said %you can't assess like the rest of the class. We need to know about different ways to do this+. Assessment in this era goes beyond the classroom - it addresses all important levels in the education of an individual learner. This calls for teachers as %assessors+ to have knowledge and skills in assessment modes, techniques and strategies.

2.4.2 CURRICULUM AND CONTENT ADAPTATION/MODIFICATION

One of the issues that countries are still battling with is making the curriculum accessible to all learners including those experiencing barriers to learning and development. In Botswana, for instance, it was reported that the curriculum is not accessible particularly to learners with severe learning challenges (Mbengwa, 2006:100). Zimba, Mowes and Naanda (2007:45) also found that in Namibia the curriculum was not accessible to all. They noted that the curriculum did not make provision for learners of different levels of ability, developmental and learning needs; did not take into account the different learning speeds of diverse learners; and excluded content that was relevant for some learners experiencing barriers (for example orientation and mobility training for visually impaired learners). In Australia, the Victorian curriculum was found to be rigid and inflexible (Loreman, 2000:4). In furthering the argument Nkoane (2006:45) states that in many contexts, the curriculum is extensive and demanding, or centrally designed and rigid, leaving little flexibility for adaptations for learners experiencing barriers to learning and development and for educators or academics to experiment and try out new approaches that could accommodate the same learners. This puts more pressure on all those involved in the learning and development processes, in particular subject teachers as they are the immediate supporters to the learners in the classroom and the whole school environment.

Given this scenario, it is evident that inclusion in some situations may be more like exclusion because the learners' needs are not being met, nor appropriate support provided in the general classrooms. It is therefore imperative that teachers are prepared to make the curriculum responsive in order to enable access to learning (Evans, 2000:37). In effect, Van Laarhoven et al. (2007:441) assert that the skills and knowledge in making curricular and instructional accommodations have been identified as critical for educators working with learners experiencing challenges in learning and development. In furthering this argument, it has been highlighted that excluded pupils are more successful when their teachers have the knowledge and the ability to adapt curriculum to meet their needs (Winter, 2006:89).

Adaptation or modification of the curriculum in an inclusive system of education does not mean excluding the learner from the regular programme, or producing and

teaching learners low quality content material. According to Loreman, Deppeler and Harvey (2005:7) curriculum adaptation means providing instruction in well-defined learning problems related to the specific needs of the learner with diverse abilities, while also ensuring that they are included in the regular programme as much as possible. Furthermore the adaptation or modification exercise should lead to holistic development of the learner. This means that the curriculum should address the social, emotional, behavioural and academic aspects of the learner as well as the specific facts that cause the individual learner to be eligible for special education services+ (Keenan in Kgothule, 2004:50). From the Salamanca Statement (1994:22) it is advised that the adaptation purposes should be for the learners' needs and not vice versa. For teachers to achieve this, curriculum content, learning strategies and activities and learning resources as well as assessment must be varied accordingly. Providing opportunities and variation in scope will enable each learner to engage in learning. Carrington and Elkins (2002:52) recommend that all learners should have opportunities for meaningful involvement in class activities where there is multi-level instruction and choices in materials and tasks+. In addition the wider the scope and range of possibilities in style and pace ...the greater the possibility that different kinds of students will be engaged by learning+ (Mathews & Keating, 1999:37). It is obvious that teachers without appropriate skills and knowledge in curriculum adaptation or modification will face great challenges in trying to meet the learners' needs.

In many cases curriculum adaptation is believed to be for the benefit of those learners experiencing barriers to learning and development. The implication is that these learners often learn at a slower pace, are unable to perform the assigned tasks, and often require more practice and repetition to consolidate learning (Loreman et al., 2005:7). While this might be true, there is also evidence that adaptation or modification of the curriculum benefit almost all learners in the classroom. This is supported by Vaughn, Boss and Schumm (2007:22) when stating that many of the adaptations you make for students with disabilities will enhance learning for all students in your classroom+. Engelbrecht and Green (2001:42) have a similar point of view: they state that very often the modifications made for one learner enhance the learning of several other learners in the classroom. This therefore shows how important it is for teachers within the inclusive system of education to be able to adapt or modify the curriculum.

2.4.3 COLLABORATION

An inclusive system of education means embracing a large number of learners in education and ESS. The learners bring with them diverse and unique cultures, abilities and backgrounds to classes. Some learners may need related service providers such as speech therapists, social workers, mobility specialists and physical therapists to access and function well in inclusive settings (Fisher & Frey; Snell & Janney; Trautman in Salend, 2005:83-4). A teacher attempting to effectively support all of those will obviously need assistance (Carrington & Elkins, 2002:54) and collaboration therefore becomes a way through which one can get assistance and support from colleagues.

Collaboration skills in an inclusive system of education are of paramount importance though these skills are unsatisfactorily addressed in teacher preparatory programmes (Van Laarhoven et al., 2007:441). Keenan (in Kgothule 2004:50) asserts that collaboration is viewed as the cornerstone of inclusion in that it allows support professionals to share knowledge and experiences. The contention is that in this system of education, it is unreasonable to think that one teacher working alone can effectively meet the diverse learning needs of every student in the classroom (Mathews & Keating, 1999:36). According to Engelbrecht and Green (2001:41) collaboration has become mandatory within the inclusive system of education.

Collaboration entails professionals working together towards a common goal. Rainforth et al., and Thousand and Villa (in Ryndak & Alper, 2003:138) state that in education, through collaboration, professionals aim to provide maximum and effective ESS for a group of learners, give each learner a chance to maximise their participation and contribution to life at school, at home, and in the community. This explanation makes the researcher to believe that collaboration leads to holistic development of an individual learner in that different professionals bring together expertise which will result in effective support.

It is worth noting that collaboration is not only for teachers and professionals, teachers should also collaborate with learners and families. These parties are important in many ways. For instance, a learner knows her/himself and therefore may provide relevant knowledge that can be used by his teacher or other

professionals in planning for his support. In addition to providing information about the learner, families have a role in assisting their children with homework (Salend, 2005:402). According to Ryan, Kay, Fitzgerald and Paquette (in Salend, 2005:158) families can provide valuable information about the learner's adaptive behaviour and medical, history on social and psychological development of the learner as well as participate in designing and implementing educational programmes and related services. The teacher is also expected to foster collaboration skills and knowledge on the learners. The teacher can achieve this by planning and assigning educational activities that for instance encourage discussion teams, problem solving and collaborative writing groups (Salend, 2005:225,380, 436).

The benefits of collaboration are not only enjoyed by learners. Teachers and families also benefit. In addition to acquiring skills, the teacher may have the chance to share resources, responsibilities, decisions and advocacy for the learners' benefit (Hunt et al., & Ruder in Salend, 2005:9). According to Chaote (2004:48) "collaboration and coordination save time and nurture teacher enthusiasm....coordinating efforts enhance expertise and progress. Such collaboration exponentially increases the chances of successes for both students and teachers". Families have the opportunity to learn more information on the support needed by their family member and can also use the same in real life other than in a school situation (Ryndak & Alper, 2003:141). Engelbrecht and Green (2007:184) also found that collaboration benefits all of the already mentioned parties. They concluded that collaboration enhances "the psychological and physical wellbeing of learners, their parents and the wider school community, and the increased professional skills of teachers and support professionals ...". Teachers' collaborative skills and knowledge will enable them to effectively participate in multidisciplinary, interdisciplinary and transdisciplinary teams. These teams are functionally important in the provision of ESS within the inclusive system of education (Mbengwa, 2006:12).

Teachers may use a variety of collaborative exercises to meet the needs of learners and systems. They may use collaborative consultation which according to Salend (2005:177) serves to address learners' abilities and needs as well as to equip teachers with the necessary knowledge and skills that would enable them to deal with similar situations in future. Teachers can also engage in collaborative problem-solving, group problem-solving, peer coaching, co-teaching and facilitating co-

operative learning (Engelbrecht & Green, 2001:41-2). All these can be possible if teachers have the appropriate knowledge and skills with regard to collaboration. If teachers do not have these, they may quickly become disenchanted with inclusive education and might see it as unrealistic and unachievable.

The other important point to note is that teachers may have little or no knowledge and skills in collaboration; these however do not mean that they should not make any effort to engage in collaboration. One important aspect that teachers can do is to show willingness to work with different people, be it learners, parents or other professionals. Mathews and Keating (2005:36) are of the opinion that teachers must be willing to work with learners, colleagues, and other educational stakeholders to create a school climate which encourages and nurtures an engagement with authentic real-world+. They continue to argue that teachers who see themselves as learners, in their own learning, are far likelier to create classroom climates which students find stimulating, and which lead to high level learning outcomes, or a knowledge of building perspective+.

2.4.4 ASSISTIVE TECHNOLOGY

Teachers knowledge and skills in the area of assistive technology are also of great importance within the inclusive system of education. This is because a significant number of learners experiencing barriers to learning and development and included in ordinary settings need assistive technology to either get to school or access curriculum and instruction (Villa et al., 2003:23). Assistive technology embraces less to more sophisticated items, materials and equipment. Examples of such include electronic communication, speech recognition, and reading systems, motorised wheelchairs, long canes, adapted keyboards, touch screens, magnification aids, pencil holders and strings attached to objects to retrieve them if they fall on the floor (Salend, 2005:17). Villa et al. (2003:31) gave hearing aids, Braille typewriter and paper, and wheelchairs as some of the examples of assistive technology. Salend (2005:17) defines assistive technology as any item, piece of equipment, or product system whether bought, modified, or customised . that is used to increase, maintain, or improve the functional capabilities of an individual with a disability+.

This calls for teachers who are knowledgeable and skilled in operating those leading to effective support to learners and systems hence maximum participation in the learning and developing processes. Croser (2004:6) has the opinion that once teachers have the knowledge and skills and are confident in using assistive technology, they would understand its application within the curriculum. It has also been emphasised that student learning is best facilitated when teachers are able to create a new blend of computer based skills and appropriate teaching methodology within curriculum requirements+(Croser, 2004:6). In furthering the argument Karsenti (2001:33) states that assistive technology may act as a catalyst for changes in teaching methods and facilitate transition from traditional teaching methods and learning activities leading to the construction of knowledge+. This is very important especially that the inclusion of learners experiencing barriers to learning and development requires teachers to vary their teaching methods. In effect a single instructional method is not effective for all learners and teaching environments (Carrington & Elkins, 2002:52).

The importance of teachers knowledge and skills in assistive technology has been emphasised and addressed globally. For instance, Croser (2004:1) states that as Australian schools progress towards inclusivity, issues surrounding the provision of and training in assistive technology within an inclusive educational context have become apparent. The same author continues to highlight that in Australia a number of reviews in the use of assistive technology have been carried out. They include for example Assistive Technology . meeting the technology needs of students with disabilities in post-secondary education of 1999 and Technology for Learning: Students with Disabilities of November, 2000+. The use of assistive technology within the inclusive system of education is further emphasised by the Technology-Related Assistance for Individuals with Disabilities Act of 1988 and the Assistive Technology Act of 1998 (Salend, 2005:17).

Teachers can use assistive technology in various aspects. For instance in individualised programmes, planning for and supporting learners with less severe learning barriers, in medically fragile learners, in differentiating instruction (Salend, 2005:54-93), for hearing, visual, physical, and reading barriers as well as for second language learners (Meiring & Norman, 2005:131).

As it was highlighted earlier assistive technology comprises a wide range of items and equipment. Information and Communication Technology (ICT) forms part of the assistive technology, and a number of researchers have worked on and established its influences on the learning of those experiencing barriers to learning and development. Meijer et al. (2003:38) reported that a significant number of countries agree that the effective use of ICT will limit inequalities in education and also that ICT can be a powerful assistive technology in supporting the inclusive system of education. It is important that teachers are knowledgeable and skilled in ICT in that it has various functions in special needs education and ESS. According to Meijer et al. (2003:45) ICT can be used as a:

- Teaching tool;
- learning tool;
- learning environment;
- communication tool;
- therapeutic aid;
- diagnostic aid;
- tool for administrative tasks and
- an individualised assistive tool to meet physical, sensory or intellectual needs.

Meiring and Norman (2005:131) also investigated the contributions made by ICT to learners experiencing barriers to learning and development. Their findings are represented in Table 4.

Having presented the benefits of assistive technology to learners experiencing barriers to learning and development, it is evident that it is crucial for teachers to have knowledge and skills about assistive technology. It is worth noting that assistive technology is not only beneficial to learners experiencing barriers in their learning, all members of the society benefit. In addition, people are to be aware that there might be consequences of using assistive technology as well (Salend, 2005:17). This again requires that teachers are well equipped with the knowledge and skills so as to guide the learners and families on appropriate usage of items and equipment in order to minimise negative effects.

Table 4: Contribution of ICT to SEN in Foreign Languages (Adopted from Meiring & Norman, 2005:131)

Contributions of ICT	Features of ICT	Examples of types of SEN	Examples of activities adaptable for foreign languages
Speed and automation (TTA)	Produces text more quickly; performs mundane operations quickly; reduces unnecessary tasks; immediacy and visual impact	Literacy; dyslexia; learning difficulties	Word-processing in FL; matching picture and text, gap-filling; PowerPoint and IWB presentations of language, including sound stimulus
Capacity and range (TTA)	Organising and categorising of vast bank of information/material; removing geographical barriers of learning environment; retrieve information at own pace; multi-media	Physically impaired; EBD; Pupils with limited concentration spans; ADHD	Authentic visuals and material; video; range of media (text, visual, sound, motion)
Provisionality (TTA)	Trying out ideas to modify learning; immediate feedback	Pupils lacking self-esteem and confidence	Word-processing: draft/redraft; Matching activities; pronunciation; assessment
Interactivity (TTA)	Non-threatening interaction; rapid, dynamic feedback	Autistic; EBD	Word-processing; games; CD-ROM simulations; hyperlinks
Clarity (Kennwell)	Appropriate font, layout and colour schemes; use of pictures; removal of extraneous material; three dimensional presentation	Literacy; dyslexia; visually impaired; learning difficulties	Display work using word-processing, DTP, frontpage.
Authenticity (Kennwell)	Genuine tasks and materials; processing text to numeric data	All	Websites; e-mail; project work; databases; spreadsheets, bar charts, graphs
Focusability (Kennwell)	Allows learning to be refined to essentials	All	Word-processing; use of search engines
Multi-modality (Kennwell)	Appeals to different learning styles; sight; hearing; interlinking of senses	Physically impaired; EBD; pupils with limited concentration spans; ADHD	IWB and PowerPoint presentations (text, visuals, sound and animation)

2.4.5 INDIVIDUALISED EDUCATION PROGRAMMES/PLANS (IEPS)

The other important area in which teachers should be knowledgeable and skilled is that of IEPs. IEPs form an important part of curriculum adaptation and differentiation for learners experiencing barriers to learning and development. Their usage is therefore a necessity especially in the inclusive system of education and ESS. For instance Meijer et al. (2003:12) report that in Europe a large number of countries indicated that IEPs play a major role for inclusive special needs education and most countries use IEPs for learners experiencing barriers to learning and development.

In effect IEPs play a vital role in the successful inclusion of learners particularly those experiencing barriers in their learning. This is because the IEP communicates to the teacher, the learner and all those involved in the learning and development of the individual learner the support needed to enable maximum participation and development in the learning process. The IEP functions as a road map for instruction and content delivery (Wood, 2002:12). According to Mastropieri and Scruggs (2000:54), when a learner experiencing barriers in learning is placed in the general education setting, his/her IEP will contain modifications needed, including curriculum, instructional procedures, staffing, classroom organisation and special equipment, materials or aides. Gibson and Blandford (2005:108) also found that IEP communicates targets and strategies for each learner and his or her teachers to focus on achieving success. In European countries the IEP is used as a document that identifies the learner's needs, goals and means, and to detail the degree and type of adaptations to be made to the general curriculum to evaluate the progresses of the concerned learner. Furthermore the document may serve as a contract between different parties involved in the whole learning and development of the learner.

The multidisciplinary team is the body usually responsible for IEPs. The teacher on the other hand also has very important roles to play in the process of development and implementation of an IEP. For the teacher to be effectively involved in the process, it is important that he possesses the necessary knowledge and skills with regard to IEP. If the teacher is not well equipped with such knowledge and skills, the situation may appear daunting (Stakes & Hornby, 2000:7) and the anticipated results may not be achieved. Some of the roles played by teachers include the following:

- Provide the team with important information about the general education curriculum as well as their perceptions of the learners' progress (Salend, 2005:64);
- establish an IEP implementation plan (Salend, 2005:67);
- determine the targets and strategies to be used in teaching and monitoring progress in lessons (Stakes & Hornby, 2000:7);
- based on the learners' earlier assessment, they help to decide on the action needed to progress (Gibson & Blandford, 2005:108);
- help with the preparation and implementation of IEP (Gibson & Blandford, 2005:108) and may have to adapt classroom procedures, teaching and learning techniques and teaching and learning resources (Mbengwa, 2006:17-18);
- engage in the evaluation process and may recommend future plans (Mbengwa, 2006:18);
- align the IEP to the general education curriculum by converting the curriculum into measurable learning objectives that can be addressed instructionally (Walsh in Salend, 2005:65) and
- engage in curriculum mapping by examining what you teach, to foster and evaluate your success at implementing the learners' IEP (Koppand in Salend, 2005:69).

Salend has also found that teachers' direct involvement in the planning of IEPs can foster the link between the IEP and the general education setting (2005:64). This is very important in that if the link is not realised, some teachers may think that IEP is only an extra piece of paper and work that does not contribute to the general learning and development of individual learners. If this idea arises, there is a high possibility that the implementation of an IEP will not be successful, therefore leading to learning breakdown. Moreover, participating in the IEP process enables teachers to establish and acquire supportive services to assist learners, access and succeed in the general curriculum (Salend, 2005:64). In addition, teachers will always have the chance to build partnership with others involved in the IEP process, which allows the sharing of problems experienced by teachers and learners, knowledge and expertise with regard to IEPs and the general curriculum. Corbett (2001:76) believes that teachers feel less threatened when they share problems.

The IEP format may differ from one country to another; however, certain components are common in all the IEPs. This might be because the motive for using IEPs is also the same, which is to provide the opportunity for individuals experiencing barriers to learning and development to have effective support that will enable them maximum participation and learning in inclusive classrooms and settings. Wood (2002:12) feels that a fundamental knowledge of these components will help general classroom teachers not only instruct learners experiencing barriers but also understand the total special education program.

The IEP serves as an important tool for providing for learners experiencing barriers to learning and development with access to the inclusive or general curriculum. Though the multidisciplinary team has the responsibility for the IEP process, the class teacher has significant roles in facilitating this. For teachers to effectively facilitate the implementation of IEPs, it is of utmost importance that they have the necessary knowledge and skills with regard to IEPs so that the motive for using IEPs within an inclusive system of education is realised.

2.4.6 OUTSOURCING

Muthukrishna (2000:66) is of the opinion that teachers working in inclusive settings need to be competent in drawing on community resources in order for them to be able to provide effective support to learners. Tapping from community resources (human and material) may help in overcoming the problem of lack of resources. Mbengwa (2006:71) established that African countries still face challenges in obtaining sufficient resources. A lack of human and material resources have been found to hamper effective implementation of inclusive education and support in Namibia (Zimba et al., 2007:47), for example.

Resources regarding current research have shown that inclusive education and support require teachers to have knowledge and skills in many areas for them to effectively function in inclusive settings. According to Muthukrishna (2007:72), for teachers to effectively provide support in inclusive settings they need to acquire foundational, practical and reflexive competencies. It has to be acknowledged however that even with appropriate knowledge and skills, teachers may still not successfully implement inclusive practices. There are other related factors that may

impede teachers' performance in inclusive schools and settings. These factors need to be identified and addressed. Therefore, the following section will focus on factors that may hinder educators from successfully implementing inclusive education and providing effective support in inclusive classrooms and schools.

2.5 BARRIERS TO EFFECTIVE PERFORMANCE BY TEACHERS IN INCLUSIVE EDUCATION AND ESS

Teachers' performance may depend on an individual country's ability to identify factors that interfere with or hinder educators' performance. Once barriers are identified, strategies to address those will be implemented and effective performance will be realised. It will also be wise if teacher training programmes are able to inform trainees of the challenges likely to be faced in schools with regards inclusive education and support. In this research, the discussion will be on factors inherent from educators and the contextual environment.

2.5.1 ATTITUDE

Attitudes are the greatest barrier, or the greatest asset, to the development of inclusion (Brandon, 2006:38; Vayrynen, 2000:4; Zimba et al., 2007:44). As argued by Stofile and Green (2007:58) "attitudes towards inclusive education...constitute a critical challenge in terms of inputs to inclusive education". They influence our perceptions of challenges, strategies to be chosen and goals to be achieved (Vayrynen, 2000:4).

Attitude as defined in Webster's New Collegiate Dictionary (1977:73), is the "mental position, emotion, or feeling held toward a fact or state". Gartner and Lipsky, Goodlad and Oakes and Hillard (in Van Reusen, Shoho & Barker, 2000/2001:3) have their definition as "predilections toward behaviour". In other words, a person's attitude or belief about something is thought to affect that person's behaviours, actions, and efficacy. Therefore, teachers' attitudes towards inclusive education may influence the learning environments and the availability of reasonable educational opportunities for all learners. Swart et al. (2002:178) suggest that attitudes are composed of a cognitive (learned) component, an emotional component and a component of observable behaviour. This implies that educators do not only

require knowledge and skills to cope with learners experiencing barriers to learning and development (the cognitive component), but ideally also positive emotional components. The same authors assume that the relationship between attitudes and behaviour is an essential link (2002:178). This necessitates that educators need to develop positive attitudes to enable positive behaviour or teaching outcomes (Swart et al., 2002:178). However, Schechtman and Or (in Swart et al., 2002:178) argue that the emotional aspects that underlie teachers' beliefs about inclusion are ignored by the policy-makers, who tend to focus on knowledge, skills and practical support without giving much recognition to implicit needs and emotional inhibitions.

Negative attitudes may arise when educators think or feel they do not have the necessary knowledge and skills to teach and support learners in inclusive schools and classrooms (Mbengwa, 2006:108). Moreover, according to Swart et al. (2002:178) research has shown that general educators are of the opinion that they do not possess adequate training, skills, time or support networks to ensure quality education for all. The other factor leading to negative attitudes is the belief educators have that inclusion is an additional responsibility on their side (Van Reusen et al., 2000/2001:3-4). Dupoux, Hammond, Ingalls and Wolman (2006:5) state that typically, general educators find it difficult to respond to the mandate to integrate students with disabilities to the maximum extent appropriate in general settings. They may perceive this as an additional burden on their already stressed workloads. Moreover, the type and severity of the learning barrier may contribute to educators' attitude. According to Forlin, Douglas and Hattie (in Dupoux et al., 2006:5), research has shown that irrespective of teaching experience, severity of disability shows an inverse relationship with positive attitudes such that as the perception of severity increases, teachers' attitudes decrease. In effect the more severe the condition the greater the chance of educators having negative attitudes. Factors including gender, administrative support, class size and educators' experiences and contacts with learners with learning barriers may also contribute to educators' negative attitudes.

Educators' negative attitudes may lead to labelling and categorising of learners. Debates on labelling and categorisation have shown that there are no positive results shown to that effect. For instance, Nkoane (2006:73-4) and Rapulumo (2006:16) state that labelling may impact on the learner's self esteem, and may

result in placement or exclusion. Nkoane (2006:74) continues to argue that negative attitudes go as far as categorising learners as ineducable, leading to learning breakdown as there will be no support accorded to such learners.

2.5.2 LARGE CLASSES

Large class sizes have been identified as one of the impediments towards teachers' effectiveness in inclusive classrooms. The researcher experienced classes having numbers of at least 40 learners in Botswana junior secondary schools, and in South Africa classes in rural areas contain up to at least 50 learners (Eloff & Kgwete, 2006:3) while in Lesotho they go up to 80. Eloff and Kgwete (2006:3) in their study *"South African Teachers' Voices on Support in Inclusive Education"* report that educators revealed that a high number of learners in the classroom hindered them from adequate teaching in inclusive classrooms. In the United States it was also discovered that planning for inclusion was frequently inhibited by class size (Tanner, Vaughn, Linscott & Galis, 1996:7). The other effect of large class sizes is that it may negatively affect educators' attitudes. As previously highlighted negative attitudes hinder effective and successful implementation of inclusive education and provision of ESS.

Generally, large class sizes make it difficult for educators to reach for individual learners in terms of preparation and planning, resources, and support services. In fact Johnstone (2007:34) is of the view that the larger the class size, the more challenges arise in terms of inclusive education. The same author argues that where there are large class sizes, educators often spend most of the time trying to maintain control over large numbers of learners. In addition, learners are mostly distracted in overcrowded classrooms, sometimes they are unable to hear, see or even follow the teacher (Johnstone, 2007:34). According to Van Reusen et al. (2000/2001:4) general educators recommended that class size should be reduced to less than 20 learners when learners experiencing barriers are included. One may think the reason for large class sizes is the fact that more numbers of learners who were in the past neglected are now included in the education systems. According to Nkoane (2006:46) *"as classrooms become more inclusive and more diverse, the number of students needing special attention increases ..."* Also large class sizes may be due

to insufficient human resources which were found to be one of the challenges of inclusive education in South Africa. According to Eloff and Kgwete (2006:3) some educators in South Africa mentioned that insufficient number of educators and support staff in the school prevented provision of quality education and support in the inclusive school.

2.5.3 RIGID OR INFLEXIBLE CURRICULUM

The curricula used in many countries are not accommodative to learners, especially those experiencing barriers to learning and development. The current research suggests that countries adopted inclusive policies while often still using the same curricula that were used during the traditional modern era. For example, Nkoane (2006:45) through his study *'an analysis of factors inhibiting the access of students with special educational needs to higher education in the Free State'* made an observation that the curriculum is mostly extensive and demanding, or centrally designed and rigid, making it very difficult for implementers to exercise creativity with regard to designing and planning accommodative strategies. Moreover, at times the subject matter appear too abstract from the context in which learners experiencing challenges live, and as such inaccessible and un-motivating. Furthermore, the curriculum might also be biased and only suitable to most able learners and unsuitable to those experiencing barriers (Glough in Nkoane, 2006:45-6). However, this has serious consequences in as far as inclusive education is concerned. The NCSNET/NCESS identified an inflexible curriculum as one of the key barriers to learning and development in that it leads to learning breakdown through a lack of relevance of the subject content, and a lack of appropriate materials, resources and assistive devices, as well as inflexible styles of teaching that do not allow variations in individual differences (NCSNET/NCESS, 1997:16; Rapulumo, 2006:17).

The effect of the rigid or inflexible curriculum becomes exacerbated when educators do not have the knowledge and skills on curriculum and instructional adaptation. Lacking such kind of knowledge and skills means educators may stick to their traditional way of teaching and assessment which in most cases may not assist learners in acquiring knowledge and skills. It is stated in the NCSNET/NCESS (1997:16) that at some point educators, often through inadequate training, use teaching styles which may not meet the needs of some learners. They may try to

make the curriculum accessible or flexible and only to do it ~~wrongly~~ leading to a compromised curriculum. Nkoane (2006:47) advises that flexibility of the curriculum should not mean lowering the standard of the curriculum, narrowing the range of curriculum activities or that, educators should focus on teaching a group and not individual learners. The author continues to say that ~~%~~ a particular teaching and learning methodology excludes students of any kind (i.e. disabled, diverse, non-disabled, SEN), then it works against the principles of an accessible and flexible curriculum~~+~~(2006:48).

Rapulumo (2006:17) is of the opinion that curricula at present mostly use assessment strategies that mostly focus on knowledge . and not skills, values and attitudes. However the teaching of skills, values and attitudes in the curriculum is crucial. Moreover in some countries, curriculum is examination oriented. Educators are therefore expected to have covered a certain amount of material within a particular time frame. In the study by Eloff and Kgwete (2006:1) educators indicated that they experienced challenges in trying to adequately teach in inclusive classrooms. One of the challenges was that they were required by their heads of departments to complete a specified volume of work within a given time period while simultaneously supporting learners experiencing learning challenges. In Lesotho for instance, educators reported that they used shortcuts so as to cover all the material for internal and external assessments. They were forced to move forward without learners mastery of the content (Johnstone, 2007:32). This means it is very difficult for educators to use an appropriate and preferred learning pace for learners. In fact, educators do not plan according to the needs of learners but to the ~~needs~~ of the curriculum~~q~~ This goes back to the idea that it is the learner who has the problem and not the curriculum . the medical deficit model of approach.

2.5.4 LACK OF PARENTAL INVOLVEMENT

Parents~~q~~ involvement in the learning and development of their children is of paramount importance especially in an inclusive system of education. Armstrong and Moore (2004:72) used Rousseau's idea that ~~%~~ extensive work with parents was one of the main characteristics of schools identified as successful in their approach to inclusive education~~+~~. Parents are the primary care-givers of their children and as such they are a central resource to the education system (NCSNET/NCESS, 1997:18). It has also

been noted from the same documents that lack of parental involvement threatens and hinders effective learning (1997:18). When doing research on *identifying stressors for South African teachers in the implementation of inclusive education*, Engelbrecht, Eloff, Swart and Forlin (2000:55) learnt that educators find the lack of contact with parents stressful. Educators indicated that they seriously need partnerships with parents for the best interest of the learner.

Parents have relevant and the much-needed information in the learning and development of their children; however the information can only be availed to teachers if parents are part to the learning and development processes. Mastropieri and Scruggs (2000:62) assert that %building positive partnerships with parents yields important benefits to your studentsqeducation... You will learn a great deal about your students from the parentsqperspective of how they learn and interact in the home and outside of school+. According to Wood (2002:187) parents have the privilege of observing their children in various settings, and therefore stand a better chance to be the first ones to realise that a child is experiencing some difficulty and can later communicate thus to teachers. In addition, if parents are involved they may continue assisting their children at home especially during the school holidays, thereby ensuring continued learning all the time. If this happens the teacher will find it easier to continue with the learner and offer support that parents could not afford to provide, and therefore resulting in improved performance of both the learner and the teacher.

Moreover, parental involvement may help in the development of positive attitudes towards inclusive education on both the learner and the parent therefore making it easier for the teacher to provide effective support, which would not be the case if parents had negative attitudes. Abosi (2003:20) found that the negative attitudes of parents towards inclusive education have affected inclusive education in Africa. The author reported that the negative attitude hinder parents from visiting support centres or even to allow their children learn alongside learners experiencing barriers to learning and development. Furthermore, parents may assist in providing resources and assistive devices that the school might fail to provide.

It is important to note that parents may not be involved due to various reasons: that may include long distances between school and home (Mbengwa, 2006:107),

negative attitudes, uncertainty of including their children in inclusive settings (Wood, 2002:190), lack of awareness on inclusive education and ESS, and schools and communities not encouraging parent participation, lack of resources to facilitate parental involvement, lack of parent empowerment and support for parent organisations, particularly in poor communities (NCSNET/NCESS, 1997:18) as well as poverty (Mckenzie & Loebenstein, 2007:190). It is even possible that educators's lack of skills to work with parents may as well hinder smooth working relations between the parties. Stakes and Hornby (2000:111) assert that educators need to have certain interpersonal skills to effectively work with parents. This calls for educators's support to enable acquisition of these skills.

2.5.5 LACK OF ENCOURAGEMENT AND SUPPORT FROM SCHOOL LEADERSHIP AND MANAGEMENT

Educators on their own can seldom influence change, and it is therefore imperative that leadership and management are involved in every aspect of the special/inclusive education paradigm shift. Engelbrecht and Green (2001:38) are of the view that ~~for~~ schools to be successful in reform efforts, they require exceptional leaders with a new paradigm of management and leadership. They need to envision a better future, empower all educators to conceptualise optimal outcomes for learners and collaborate actively as well as facilitate collaboration to achieve these outcomes+. According to McNulty, Brian and Connolly (as cited in Kgothule, 2004:80) change needs active involvement of all parties; the school management or leadership is what makes change to occur (Daane, Bernie-Smith & Latham cited in Kgothule, 2004:80). In light of the above, it is evident that lack of encouragement and support from school leadership and management will lead to failure in inclusive practices because the principal who is a school leader and a manager is said to be the single most influential individual in creating school culture and climate (Engelbrecht & Green, 2001:38; Rapulumo, 2006:25). This school culture and climate should be geared towards successful implementation of inclusive education and provision of ESS.

The researcher finds it imperative that there should be collaboration between educators, school leadership or school management in the implementation of inclusive practices, none of the teams must be seen to show insignificant participation or resistance. It is advised that the relationship between educators,

leadership and management should be collegial, with no one party expected to perform all activities and come with solutions to the problems that need to be addressed (Kgothule, 2004:81). Both teams can work together with the aim to achieve successful classroom management, effective instructional techniques, appropriate accommodative practices and instructional flexibility (Kgothule, 2004:80-1), as well as effective provision of ESS within the inclusive school. In particular, the school leader and manager can encourage and support educators by:

- Facilitating the development of a shared vision for an inclusive school;
- providing instructional leadership;
- establishing extensive support network and
- establishing and facilitating collaboration patterns (Engelbrecht & Green, 2001:38-9).

Mayrowertz and Weinstein (1999:424) also identified functions of leadership for inclusive education and some of them are:

- Providing and selling vision;
- obtaining resources and
- handling conflict.

2.5.5.1 Providing and selling vision

The leadership and management vision for inclusive education is crucial in that it directs and influences the school community on the whole business of inclusive education and support services. According to Engelbrecht and Green (2001:39), the vision reflects the values of inclusive practices and the belief that all children can learn and that diversity is cherished. This then is translated into providing all learners access to an integrated curriculum and quality education. This is important to teachers in that the vision will serve as a working guideline towards the successful implementation of inclusive education and provision of ESS. Senge (in Kgothule, 2004:98) states that there are always questions addressed by an organisational vision, such as . how do people establish a direction, and how do people establish an aim? With this guideline teachers are likely to show greater performance . they would aim to achieve what is reflected on and expected by the leadership and management vision, however, it will be the opposite if there is no explicit vision on

inclusive education, in effect %where there is no vision, the people will perish+(Senge in Kgothule, 2004:99).

Through vision, the leadership and management are able to model their responsibilities and influence the subordinates towards the implementation of inclusive education and provision of ESS. McNulty, Brian and Connolley (in Kgothule, 2004:99) postulate that a %vision articulates a view of a realistic, credible, attractive future for the organisation, a condition that is better in some important ways than what now exists+. Kgothule's argument is that without a vision, no group will survive for very long. That is why it is so important for educators to be encouraged and supported through leadership and management vision for inclusive education and ESS to avoid breakdown of the implementation.

2.5.5.2 Providing instructional leadership

Instructional leadership is viewed as an absolute necessary responsibility of all principals. It consists of a mixture of various tasks that include direct assistance to teachers in curriculum design and adaptation, staff and team development as well as action research (Engelbrecht & Green, 2001:40). Instructional leadership calls for the principal to actively and constantly work with teachers in various circumstances, facilitating their thinking about practice and providing the necessary support and encouragement to learn and acquire new information and skills (Engelbrecht & Green, 2001:40). This is very important especially when educators feel they do not have adequate knowledge and skills to effectively implement inclusive education and provide ESS to learners and systems.

2.5.5.3 Establishing extensive support networks and obtaining of resources

It is crucial to establish support networks and obtain resources especially in places where there are insufficient resources. The lack of or insufficient resources results in learning breakdown in that without the necessary equipment and devices, the needs of learners will not be met. The DoE (in Kgothule, 2004:102) emphasises that obtaining resources is vital because it facilitates school plans aimed at achieving its goals such as effective implementation of inclusive educational system. In effect both human and material resources are of significant importance, as lack thereof can hinder the implementation of even the best policies (Burden, 2000:37). It also may contribute to unpleasant attitudes which constrain effective implementation of

inclusive education and support. Some of the specialised equipment and devices are too expensive, therefore making it more challenging for individual schools to acquire. However, with the partnership of parents and the entire community, the problem may be resolved or better addressed. On this note Engelbrecht and Green (2001:40) assert that the same collaborative partnerships should be continuously established with the motive to share the responsibility of realising effective education for all. It is therefore upon the school leadership and management that support networks are in place so as to empower people to help to support themselves and others.

2.5.5.4 Establish and facilitate collaboration patterns

Collaboration has always been said to be one of the best strategies towards the implementation of effective inclusive education and provision of support services. It allows parties to share ideas and learn from each other. It may also lead to the sharing of resources. Engelbrecht and Green (2001:39) are of the opinion that collaboration is essential for establishing inclusive cultures and climates. It is therefore of paramount importance for leadership and management to establish and facilitate those especially where there are problems of inadequate training and lack of knowledge and skills and where resources are scarce. Leadership and management can achieve this by modelling to educators good elements of collaboration. For instance, when leadership and management show willingness to listen and agree to other people's ideas though different from theirs.

Leadership and management can also support collaboration patterns by allowing educators time to plan, share and develop roles, rules and responsibilities. Furthermore, leadership and management can facilitate collaboration by providing opportunities for ongoing and systematic formal training in collaboration skills.

2.5.5.5 Handling conflict

Conflict can be a push or a pull factor towards the implementation of inclusive education and provision of ESS. The good part is that it allows people to air their views either positive or negative which may lead to better actions towards the implementation of inclusive education and provision of support services. According to Sterling and Davidoff (2000:75) conflict plays an important part in any organisational life, including a school. In fact the push and pull factors of conflict

make problems and differences to be brought out in the open in order for solutions to be established and put in place. This means school leaders and managers should have strategies in place to address conflicts or hindrances in relation to the implementation of inclusive education and provision of ESS. Some of the strategies that school leaders and managers may use include:

- Looking for early warning signals that tell that there is an underlying cause requiring attention, identify the real cause and address it. Sometimes people experience personal or interpersonal conflict, and all they need is understanding and support. At other times, resentments and fears might need to be brought out into the open, because they really concern a wider group or even the whole school;
- try to keep the focus on a common vision. This means focusing on the interests of everyone, rather than on fixed positions that aggravate the conflict; also support those who want to find solutions. Try to make those who are aggravating the situation, understand that their behaviour is not beneficial to their cause. Make sure that, as a leader, you contribute as a moderator and not an aggravator;
- it is better to resolve conflict in its early stages. However one needs not rush into anything, thus ending up compromising important principles, such as supporting and promoting inclusion and diversity in the school. Rather, accept that there is conflict, and that everyone should deal with it openly and honestly and
- if the conflict grows, a school leader needs to analyse, at every stage, whether it calls for improved understanding, mediation, negotiation or the educational leader making a decision. The educational leader has to find out whether the conflict emerged because the parties involved are not clear about what is expected of them, because they are struggling with the practical problems of transformation or because those involved refuse to respect diversity and policies aimed at achieving inclusion. Sometimes it is possible to resolve these conflicts internally, but sometimes the principal may need to

involve an independent mediator whom all parties trust (DoE in Kgothule, 2004:110).

2.5.6 INSUFFICIENT FACILITIES, INFRASTRUCTURE AND ASSISTIVE DEVICES

Facilities, infrastructure and assistive devices in this study include buildings, instructional resources (material) and equipment. Insufficiency of these results in poor conditions of service and therefore frustrates educators. For example, in Lesotho it was learnt that teachers are frustrated with the lack of materials they have available to them+ (Johnstone, 2007:31). The frustration leads to poor performance of both the educators and learners and the entire school community. In effect, the study of Swart et al. (2002: 184) reveals that the successful accommodation of learners experiencing barriers to learning and development requires facilities, infrastructure and assistive devices, which in most cases are reported to be lacking or insufficient. Lazarus, Daniels and Engelbrecht (1999:45) also are of the opinion that buildings are supposed to be friendly in order for inclusive education and support services to succeed. For instance, they state that buildings and classrooms should have sufficient ventilation, lighting, must be clean and have enough space to accommodate all. Moreover, the school should have passages and corridors that enable easy movement for all.

The lack of the facilities, infrastructure and assistive devices also leads to educators having little or no knowledge on the type needed for successful implementation of inclusive education and support services. Johnstone (2007:31-2) argues that little of or no knowledge about these would hamper the effective implementation and support. On this note it is said that educators would therefore need training on the right type of facilities, infrastructure and assistive devices and how to use them (Johnstone, 2007:31).

2.5.7 LACK OF CLEAR SCHOOL POLICY/GUIDELINES ON INCLUSIVE EDUCATION AND ESS

Clear policy or guidelines on inclusive education and ESS have a great impact on teacher performance. According to Oswald (2007:147) "when policy initiatives are not linked to clear implementation strategies, feelings of powerlessness and hopelessness prevails". Individual schools are therefore required to have clear policy or guidelines that establish implementation strategies, rights and responsibilities, and provision of the necessary resources. A lack of those will result in deterred or no progress in teacher performance. In effect the absence or lack of clear policies or guidelines may lead to uncertainty and neglect with regard to the implementation of inclusive education and support services on both teachers and other related stakeholders. Booth (2000:20) contended that if policy or guidelines are not spelled out, implementation remains patchy. The researcher believes that clear school policy or guidelines are a motivating and supporting strategy towards teacher effectiveness that should not be ignored.

2.5.8 INADEQUATE KNOWLEDGE, SKILLS AND TRAINING ON INCLUSIVE EDUCATION AND ESS

A number of research studies on teacher attitudes indicate ordinary or general teachers' perceptions of inadequate knowledge and skills to support learner diversity appropriately in inclusive classrooms. The findings by Swart et al. (2002:178) showed that teachers remain unknowledgeable and unskilled even after pre-service and in-service teacher education programmes. Teachers are of the feeling that the current programmes do not adequately prepare them for the realities of inclusive classrooms. Further, the study carried out by Hay, Smith and Paulsen (2001:216) on *Teacher preparedness for inclusive education* revealed that teachers did not feel equipped to function in inclusive classrooms and the common explanation given was that they had not had sufficient training to deal with inclusive classes. Out of a total of 2577 respondents, only 245 felt they were equipped with the necessary knowledge and skills to function effectively while 2332 felt they were not.

However, teachers' lack of the necessary knowledge, skills and expertise to understand and assist these learners causes frustration, de-motivation and serious feelings of inadequacy which disrupts effective teaching and successful learning

(Prinsloo, 2001:346). In furthering the argument, O'Sullivan (in Oswald, 2007:147) asserts that inadequate training, knowledge and skills creates doubts about teachers' sense of competence and affect their self-concepts. Mdikana et al. (2007:129) concur and assert that inadequacy in training, knowledge and skills creates a feeling of hopelessness and helplessness and as a result the concept of inclusive education for many teachers is anxiety provoking. The effects of inadequate training, knowledge and skills truly indicate that teachers' performance will be negatively influenced.

2.5.9 DAUNTING EFFECTS OF INCLUSIVE EDUCATION

The daunting effects of inclusive education are likely to negatively affect teacher performance in inclusive education and support. Educators in ordinary schools on several occasions have fear that including learners experiencing barriers to learning and development will negatively affect the normal teaching and learning processes. The concern of educators is on the quality of attention paid to learners experiencing barriers, the possible emotional and academic effects of inclusive education on such learners, the possibility of disruptive behaviour, and the educational neglect of learners without learning barriers (Swart et al., 2002:185). The fact that educators have such doubts and/or concerns makes it likely that they develop negative attitudes towards learners experiencing barriers to learning and development. They may exclude the same learners in the teaching and learning processes in order to avoid negative effects anticipated when they include and support them along their counterparts who are not experiencing barriers. On the other hand, the normal learners may also be neglected while trying to cater for those experiencing barriers to learning and development that teachers fear might experience emotional and academic challenges when included.

It seems therefore that the daunting effects will leave uncertainty on the side of educators, and they will in most cases compromise on the teaching methods and strategies, content and support which will certainly influence their performance. It is therefore imperative that strategies that influence acceptance and understanding of both parties (educators and learners) are in place. One of those recommended is early intervention, which is believed to lead to higher levels of acceptance and understanding (Swart et al., 2002:185).

To conclude, the researcher is of the feeling that barriers to effective teachers' performance are countless. They emanate from the educators themselves and from the contextual environment. For educators to successfully perform within the inclusive system of education and ESS, the barriers need to be eliminated or at least addressed. They can be addressed through continuous support to both educators and other related stakeholders involved in the learning and development of learners. The following section will therefore discuss support to parents, leadership and management and to teachers. The researcher feels it is appropriate not to discuss support to teachers only since the related stakeholders identified need support to enable them to support teachers in the whole process of inclusion and ESS.

2.6 SUPPORT STRATEGIES TOWARDS EFFECTIVE TEACHERS' PERFORMANCE IN INCLUSIVE EDUCATION AND ESS

If teachers are meant to drive the implementation of inclusive education and provision of ESS, it is imperative that all disabling factors to their performance are alleviated. Such strategies should aim to support systems that directly or indirectly affect teacher performance. This is because teachers need partnerships with those to effectively function within the inclusive system of education and provision of ESS. It is therefore imperative that teachers are exposed to different strategies during pre-service training in order for them to be able to employ those or facilitate their implementation in order for inclusive education and effective support to be successful.

2.6.1 PARENTAL EMPOWERMENT

Empowering parents is very important especially that the inclusive system of education emphasises their involvement in the learning and development of their children. Clark (1997:168) argues that for any change anticipated or planned, parents should be the first to be contacted to ensure a successful and lasting impact. Empowering parents will assure working partnerships with teachers and schools.

There are several ways in which schools and teachers can empower parents so as to make them comfortable working with them at any time for the goal of wanting the best for their children.

2.6.1.1 Teachers and parents in the classroom

- Teachers should be sensitive with individual parental needs and make them welcome in the classroom;
- help parents to understand all that is done in class and that which is expected of them and where to assist or do. If it means using a different language than English teachers should do so. Interpreters may be helpful especially to parents with hearing impairments;
- information should be read to parents without pre-requisite literacy skills;
- request and invite parents to assist in various aspects that may include class assistants, making photocopies, baking cookies for class parties;
- establish a homework communication line with parents;
- arrange meetings where parents are notified on the child's difficulties;
- involve parents in problem resolution and
- advise parents of the available resources and support in the school (Mastropieri & Scruggs, 2000:63).

2.6.1.2 School and parents

It is very important that there is a positive two-way communication between the school and parents. Schools are therefore supposed to see to this effect. McKenzie and Loebenstein (2007:199) state that it is crucial that all parents are accorded the chance to communicate with their children's school and teachers. Communication has to be continuous; however, it is important that schools initiate communication at the beginning of the year. According to Mastropieri and Scruggs (2000:63) the best way to do this is to send parents introductory notes at the beginning of the year. The same authors are convinced that a positive first communication is especially important if a problem arises later and contact with home is necessary. Parents may be more likely to feel comfortable discussing sensitive issues concerning their child if you have contacted them earlier.

Communication has to be as simple as possible. For instance, in cases where parents use languages other than the one used at school (in most cases English), the schools should use home languages. Moreover, various forms of communication modes should be available to parents. Communication can be done through written notices, telephones, meetings, street, or ward representatives. This will address the concern aired in the research of Singh et al. (in McKenzie & Loebenstein, 2007:199)

that parents find it difficult to understand the technical language often used in parent meetings and therefore seem to support decisions that they later reject or show little enthusiasm for.

Parents themselves need support to develop good communication skills. The argument by Lacey and Lomas (1993:155) is that when parents have good communication skills, they are able to communicate their needs, hopes, fears and desires for their children. Good communication skills will lead to better participation and performance in service delivery teams for example multidisciplinary teams.

In addition, parents need support on strategies and programmes that will enable them to support their children at home. If parents and teachers use similar strategies and programmes for the learner, there is a high possibility of effective intervention. In support to this, Lewis and Doorlag (2003:36) assert that the parents' awareness of the specific programme designed for the learner and the resultant coordination between home and school can make an important difference for many learners in inclusive settings. In furthering the argument, Clark (1997:255) is of the opinion that if parents are not informed of the programmes and strategies and the goals of those, they are likely to hinder the whole process of support.

Moreover, parents should be empowered with knowledge and skills to handle disability issues. Mastropieri and Scruggs (2000:65), Mbengwa (2006:58-9) and Wood (2002:189) express a concern that when parents learn of their child having a disability they often experience emotional turbulence. It is therefore imperative that they are supported to that effect. The school can facilitate this kind of support by requesting assistance from ESS professionals including school social workers, counsellors or special education teachers. Expertise outside the school can also be requested to assist in areas they are knowledgeable on. Once parents have been helped to understand their child's disability they will freely collaborate with educators and school at large with the motive to support their child. It may be necessary for schools to organise disability resources for parents so that they learn more information from those. According to Mastropieri and Scruggs (2000:65) parents appreciate knowing names of books or articles that describe additional information on their child's condition.

Last but not least, parents need support on proper parenting styles that will enable them to work smoothly with their child experiencing barriers to learning and development. It has been argued that inappropriate parenting styles may lead to breakdown in learning and development (Clark, 1997:255).

Some of the areas where parents need support are represented in Table 5.

2.6.2 LEADERSHIP AND MANAGEMENT EMPOWERMENT

It has already been shown in chapter 2.5 that school leadership and management play an important role in the successful implementation of inclusive education and provision of ESS. According to Wood (2002:185) leadership and management not only can influence the necessary administrative procedures to accommodate learners experiencing barriers to learning and development, but they can also provide access to necessary training opportunities for educators who are implementing classroom adaptations. It is therefore imperative that they are empowered to enable them to effectively support the school community, especially teachers in relation to inclusive education and support. Concurring with this argument, some scholars for example Kisanji (1999a:15) have established that school leadership and management require additional training in order to play an effective leadership role. Moreover from The Salamanca Statement (1994:23) it is specified that school leadership and management will only make schools more responsive to learners experiencing barriers to learning and development if they are given necessary authority and adequate training to do so.

Table 5: A model for parent involvement (extracted from Mckenzie & Loebenstein, 2007:196-7).

Parents' contribution	Parents' needs
Information Example children's strengths and challenges, likes and dislikes and their developmental history	Communication Example reports both written and verbal, notes, homework diaries . this implies a two-way flow of information
Collaboration Example creating a physical and emotional space for doing school set tasks at home, encouraging the completion of homework, helping with reading, being a partner to the teacher in support programmes	Liaison Example meetings, both formal and informal, with teachers and other staff members, home visits

Resource Example classroom aides, in school maintenance, fundraising and giving support to other parents	Support Example parent workshops, various forms of adult education
Policy Example being involved in decision making as members of the school governing body; being part of advocacy groups	Support Example general support in being welcomed into the school, being part of a parent support group, having access to counselling.

In the context of South Africa for example, the DoE (in Kgothule, 2004:85) recommends that management and governance development programmes will be revised to incorporate orientation and training in the management and governance implications of each of the categories of the new+ inclusive organisations. ... Training will focus on how to identify and address barriers to learning+. Moreover, there are steps that school leadership and management should become acquainted with, because they provide direction towards inclusive education and support. They include:

Step 1: Examine the conditions and needs in the school. This will answer questions on school population, relationships, quality of learning, teaching and management, participation of parents, discipline and security, as well as policies,

Step 2: Get people to agree on the need for diversity and an inclusion strategy in the school. In this step, stakeholders could propose different interest groups for working on diversity and inclusion in the school,

Step 3: Set up a diversity and inclusion work group. This group should have representatives from all the different interest groups, and should see itself as being responsible for taking the strategy forward,

Step 4: Draw up a diversity and inclusion code of conduct. This should set down the basic standards of behaviour, language and so on, ensuring that there is respect for everyone's differences,

Step 5: Set goals for change. It means that there should be visible signs or ways of measuring how the school is managing inclusion and diversity (DoE in Kgothule, 2004:86).

In this research it is believed that school leadership and management should be empowered with skills in:

- Drawing, interpreting and implementing inclusive education policies, vision and mission;
- Collaboration;
- networking with parents, communities and external agencies;
- seeking and acquiring external support and resources;
- instructional leadership;
- diversification of learning options and
- supportive strategies to educators and learners.

It is however, important to note that school leadership and management can only be successful through educators support. The Salamanca Statement (1994:23-24) asserts that successful school management depends upon the active involvement of teachers and staff, and the development of effective co-operation and team work to meet the needs of students.

2.6.3 SUPPORT TO EDUCATORS

The factors inhibiting successful performance of educators (cf. 2.5) necessitate that support be provided to teachers to enable them to function effectively in inclusive classrooms and schools. Teachers need support to acquire the necessary knowledge and skills on inclusive education and support, to develop positive attitudes, to handle stressful situations, to acquire the necessary resources, to modify curriculum content, and develop and implement IEPs (Mbengwa, 2006:60-61), to be able to address the challenges provided by social, emotional and behavioural problems (Consultative Paper No 1, 1999:26), as well as to work with parents.

The importance of having the aforementioned, have already been discussed in various sections of the chapter (cf. 2.3; 2.5). This means the discussions will focus on the two aspects which have not been addressed earlier.

2.6.3.1 Handling stressful situations

Educators are likely to experience stress in inclusive classrooms and settings. Several factors may lead to this kind of situation. For example, a few are the inability of educators to identify and cater for learners experiencing barriers to learning and development, insufficient resources, and the complex nature of special need. As

argued by Engelbrecht, Green and Naicker, (1999:157) teachers have to deal with complex dilemmas both in and out of the classroom in the process of delivering the curriculum in a way which is relevant to the diverse needs of their learners. This situation often creates stress and can exacerbate feelings of loneliness and isolation. Teachers are consequently in need of concrete advice on handling difficult situations to enable them to cope. On this note, it is crucial that teachers are offered support to handle any stressful situation in relation to including learners experiencing barriers to learning and development in inclusive classrooms.

2.6.3.2 Addressing challenges provided by social, emotional and behavioural problems

Learners bring with them different situations to classes which affect their day to day learning and development. Some of these include social, emotional and behavioural problems. It is imperative that such problems are attended to in order to enable maximum learning and development. For example, in South Africa the recommendation is that educators should be equipped with skills to address the challenges arising due to social, emotional and behavioural problems (Consultative Paper No 1, 1999:26). This means educators should be able to make classroom adaptations for learners experiencing the said challenges. According to Mastropieri and Scruggs (2000:95), general adaptations can facilitate the inclusion of learners with emotional and behavioural disorders into ordinary education classes. In this regard educators in South Africa can be offered support by support teams in schools, special schools, as well as special educators and external ESS professionals.

2.6.3.3 Support to teachers in Europe

In European countries teachers are offered support in the form of information, selection of teaching materials, elaboration of IEPs as well as organisation of training sessions (refer to Table 6). Support is provided by specialist teachers in ordinary or regular schools, and external educational services (Meijer et al., 2003:26).

Table 6: Different forms of educational support to class teachers in European countries (extracted from Meijer et al., 2003:27-30).

Country	Types of professional services
Austria	Support is mainly provided by specialist teachers from special schools or from visiting services. They support both the class teacher and the pupil. Classroom and specialist teachers work as a team, sharing the planning and organization of the educational work. Professionals from visiting services may offer temporary direct support to included pupils presenting specific disabilities.
Belgium	Support is mainly provided by specialist teachers from special schools and from centres for Pupil Guidance. They provide information, advice and support to the class teacher. It is possible to find remedial teachers working as school staff members. They mainly support pupils presenting short-term difficulties, but more and providing direct support to class teachers and the school, trying to co-ordinate provision of support, working methods and educational programmes.
Cyprus	Support is provided by specialist teachers fully or partially attached to the school and by specialists, such as speech therapists, who have specific time allocated to each school. Outside the school, central services, such as inspectors, SEN co-coordinators, education and psychology specialists, or health and social services, also provide the necessary support.
Czech Republic	Support is mainly provided by specialists, teachers or other professionals, such as psychologists. They provide advice and support to class teachers, parents and direct support to the included pupil. Support is provided through special educational centres or pedagogical psychological advice centres according to the specification of the pupil's need. These specialist advice and guidance centers are in charge of determining, proposing and providing support and elaborating the individual educational plan in close co-operation with the class teacher, the parents and the pupil (in accordance with his/her impairment and level of active participation).
Denmark	Support is mainly provided by a specialist teacher working as a school staff member. They co-operate inside the class with the class teacher on a part-time basis. Group teaching outside the classroom is another possibility where the pupil needs regular support in more than one subject. Local pedagogical services are in charge of determining, proposing and following the type of support to be provided to the pupil in close co-operation with the mainstream school.
England and Wales	All schools have a member of staff who is the designated special educational needs co-ordinator with a wide range of responsibilities, articulated in the Special Educational Needs Code of Practices (DfES, 2001), including: overseeing provision, monitoring pupils' progress, liaising with parents and external agencies, and supporting colleagues. Support is also provided by external agencies, specialist support services (from the education department and the health authority), colleagues in other schools, and other LEA personnel. Peripatetic staff work increasingly with teachers, in order to develop teaching approaches and strategies within the school, rather than directly with pupils.
Finland	Support is mainly provided by a specialist teacher working as a school staff member. A counseling teacher, school social worker or school nurse, depending on the local educational authorities, can also provide support to the school in general, to the teacher and/or pupil. A pupil welfare team is set up involving the pupil, their parents, all teachers and any other experts involved in order to prepare an individual educational programme to be implemented in the mainstream school. There also exists a pupil support group involving all professionals and the principal of the school to ensure good educational conditions and progress.
France	Support is mainly provided by specialist professionals from various services. They support included pupils on a short- or long-term basis. They also help the class teacher and the school staff. Specialist teachers from special support networks also provide

	support to pupils presenting temporary or permanent learning difficulties.
Germany	Support is mainly provided by a specialist teacher from a special school or from a social service. Support is diverse and includes preventive measures, joint education actions in mainstream schools, education co-operation between special and mainstream schools others. There can also be a support teacher working as a school staff member. They are mainly teachers specialising in language or behaviour problems. They work mainly with pupils inside or outside the classroom according to pupilsneeds.
Greece	Support is mainly provided by a specialist teacher from a special school. Their work consists of directly helping the pupil, assisting the teacher with the variety of teaching materials and in differentiating the curriculum . informing other pupils and ensuring good co-operation between the school and the family.
Iceland	Support is mainly provided by a remedial teacher working as a school staff member. Other types of support are also provided by specialist teachers, psychologists or other professionals from the local municipalities. They will provide general advice on the curriculum and on the teaching of the main subjects: guidance for pupils and psychological counselling. Their aim is to support teachers and head teachers on daily school-work and school improvement.
Ireland	Support can be provided by a specialist or resource teacher working as a school staff member. They are dealing with pupils assessed learning disabilities. Support can also be provided by a remedial teacher working as a school staff member. Their main aim is to work with pupils with difficulties in reading and mathematics. All primary and post-primary schools have such a teacher. Another type of support is a visiting teacher from the Visiting Teacher Service (Department of Education). They work with individual pupils, both inside and outside the classroom, and advice teachers on teaching approaches, methodology, programmes and resources. They also provide support for parents. The Psychological Service of the Department of Education and Science provides assessment and advisory service for mainstream schools with a focus on pupils with emotional and behaviour problems and with learning difficulties.
Italy	Support is mainly provided by a specialist teacher working as a school staff member. They act as class teachers, providing support in the mainstream school after obtaining parental authorization. Support teachers share responsibility with the class teacher concerning the work to be done with all pupils. Implementation of individual pupils education plan is one of their main tasks. They also support pupils inside the classroom; pupils with disabilities are not to be pulled out of their classes unless absolutely necessary.
Lichten-stein	Support is mainly provided by a specialist teacher from a special school. They mainly provide support to pupils but also to teachers and parents.
Lithuania	Support is mainly provided by specialist teachers, school psychologists, speech therapists, social pedagogues from special schools or from pedagogical psychological services. Specialist teachers provide class teachers with information and practical support; elaborating an individual educational programme, selecting educational materials and others. Support can also be provided by a remedial teacher, speech therapists, school psychologists working as school staff members. These specialists are mainly available in mainstream schools in big cities or towns; there is still a lack of specialists in rural areas. Pedagogical psychological services at local or national levels provide assessment of pupils and guidance for education of included pupils.
Luxem-bourg	Support is mainly provided by specialists support professionals from the SREA (Ambulatory Remedial Department). They are professionals in education and rehabilitation and share responsibilities with class teachers with regard to direct support to the pupil. Class teachers are always in charge of the organisation of the class.

Netherlands	Support is mainly provided by a support teacher from a special school. They work with the class teachers to develop educational programmes, to prepare and provide additional materials, to work with pupils individually and to contact parents. Support may also be provided through mainstream schools with experience in inclusion. Support focuses on information to teachers, assessment and providing teaching materials. A support teacher may also be one of the mainstream school teachers providing direct help and support to the pupil.
Norway	Support is mainly provided by a specialist teacher working as a school staff member. They co-operate with the class teacher part-time. Support can also be provided by an assistant in the classroom. There is close co-operation between the three of them. The local educational psychological services are the ones to advise school and parents on the content and organization of the education required for the pupil. They are the people mainly responsible for advising teachers on the daily work.
Poland	Teachers working with disabled pupils receive support from the National Centre of Psychological and Pedagogical Support or from regional Teaching Methodology Centres. These centres provide training courses for teachers. Mainstream schools are to provide psychological support to pupils, parents and teachers as well as organizing, for example, remedial classes.
Portugal	Support is mainly provided by specialist teachers, or other professionals either from local support teams or internal school staff members. National policy gives priority to the second situation. The aim is to create co-ordinate teams which will provide guidance to class teachers. They co-operate with class teachers in order to reorganize the curriculum in a flexible way; to facilitate differentiation of educational methods and strategies; to support teachers and pupils and contribute to educational innovation.
Spain	Support is mainly provided by a specialist support teacher working as a school staff member. They work in primary and secondary schools and play an important role with the pupil and the teacher, planning together the curriculum differentiation and its implementation. Another type of support is a remedial teacher for learning support, present in all primary schools. Support can also be provided by local psychological pedagogical support teams. They are responsible for the assessment of pupils, advising teachers and school staff on the measures to be taken, following pupils' progress and involving families.
Sweden	Support is mainly provided by a specialist teacher working as a school staff member. Municipalities are responsible for providing and financing support to schools. If needed, support to build up knowledge in the municipalities can be provided at a national level through the Swedish Institute for Special Needs Education.
Switzerland	Support is mainly provided by support teachers, specialist teachers or specialist professionals from special schools or mainstream schools (milder forms of SEN). They provide support to included pupils and their teachers.

2.6.3.4 Support to teachers in South Africa

South Africa has also put mechanisms in place to support teachers. These include the use of clusters and networks (Engelbrecht & Green, 2001:49), District-Based Support Teams (DBST), School-Based Support Teams (SBST), and special schools converted to resource centres (Education White Paper 6, 2001:28-9). Educators may receive support directly from these or indirectly through their schools.

Clusters and networks . these would help in supporting educators and schools in places where there are scarce resources. Engelbrecht and Green (2001:49) and Westwood, (1997:203) are of the opinion that through clusters and networks educators and schools are able to share resources, expertise, plan together, and address problems as a team.

District-Based Support Teams (DBSTs) . the aim to utilise DBSTs is to pool resources from different departments to enable optimum use of them (Engelbrecht & Green, 2001:49). Some of the roles expected of the DBST are as follows:

- To develop a holistic community-based approach to support services;
- to build the capacity of school-based support teams;
- to facilitate the assessment of system's needs and learner needs;
- to initiate school-based educator development programmes to make school responsive to diversity;
- to play a consultative role in supporting educators in schools, where necessary;
- to facilitate the development of competencies within the community itself and
- to assist schools to access community support.

School-Based Support Teams (SBSTs) . these teams allow immediate intervention to learners in that they are based in schools. Mbengwa (2006:76) is of the opinion that SBSTs reduce challenges that would normally be faced by schools in trying to access ESS from outside the school. Engelbrecht and Green (2001:48) state that the focus of the SBSTs includes the identification and addressing of learning barriers as well as to pool support from outside. Furthermore, in South Africa the responsibilities of SBSTs will be to establish networks that promote effective communication between different stakeholders; identify and discuss learner development; placement of the learner in a suitable setting; facilitate the sharing of resources; encourage teachers to share ideas; ensure parental involvement; plan preventative strategies; support teachers on site, and monitor and support learner progress (Landsberg et al., 2005:66-67). Through these teams, teachers may acquire skills to address barriers to learning and development and to support learners and systems within inclusive system of education (Mbengwa, 2006:76).

Special schools as resource centres – special schools are able to support ordinary schools in terms of human and material resources (Mbengwa, 2006:77). In the South African context, the roles to be played by special schools include providing specialised professional support in relation to curriculum, assessment and instruction to neighbourhood schools; coordinate support from the community and vice versa (Landsberg et al., 2005:65). Furthermore, Engelbrecht and Green (2001:49) assert that special schools can prepare learners experiencing barriers to learning and development for inclusion in schools; provide and support them with early intervention; provide home-based support, access to resources including Brailing facilities; sign language interpreters and specialized transport, engage in community outreach activities that target disability awareness and advocacy.

Generally support to all stakeholders in the learning and development processes of learners is very important. Teachers in particular need continued support because they meet diverse population everyday and are expected to effectively support all learners and systems. Without support, especially to teachers, the learning and development of the school population is at stake. Like it was earlier on mentioned, teacher training programmes need to equip teachers with knowledge and skills on support strategies relevant for effective implementation and concomitant support.

2.7 CONCLUSION

The chapter looked at international perspectives on special/inclusive education, ESS and teacher training. It was learnt from literature that teacher training in the field of special and inclusive education is influenced by both traditional and post-modern approaches. The traditional modern approach, which in this research is equated to the medical model in education, emphasised fixing or curing conditions within humans. The post-modern approach or the social model in education, maintains that a human being or a learner cannot be detached from the contextual environment, therefore all the systems should be considered when addressing the problem encountered by the learner.

Because of these different approaches, teacher training programmes were different . and therefore leading to different teacher roles in different settings. It was only recently (early 1990s) that the introduction of inclusive education and ESS

necessitated rethinking and restructuring of teacher training programmes. The implementation of inclusive education and provision of ESS requires teacher training programmes that equip teachers with knowledge and skills to effectively include and support learners in ordinary schools along the social model.

The literature revealed that in trying to align teacher training with inclusive education and ESS, countries and states tried to improve initial (pre-service) teacher training. Furthermore, in-service training or CPD has been found to be important in as far as teacher training and inclusive education are concerned. Because of this, countries have made efforts to provide in-service training to educators.

However, there are still challenges regarding special or inclusive and ESS teacher training in general. It seems as if there are still inequalities existing between general teacher training and special or inclusive education, ESS and teacher training. In fact, the researcher feels more needs still to be done in this area, for these challenges lead to ineffectiveness of teachers. From this research it was felt it will only be proper and beneficial if the challenges are identified and strategies put in place to address those. Countries such as South Africa and those in Europe were discovered to have support mechanisms in place for educators and this is viewed as a fruitful step towards the successful implementation of inclusive education and provision of ESS by educators.

The question is, whenever countries talk about inclusive education and support, whether they do address the issue of teacher education and training? In effect the demands of inclusive education necessitate that individual countries and states should align teacher training with inclusive education and ESS. The following chapter will focus on Botswana, of which Mbengwa (2006: 171) has found that it is one of the countries that have made great progress towards the implementation of inclusive education and provision of ESS. The chapter will try to establish if the country has aligned teacher training with inclusive education and ESS.

CHAPTER 3

TEACHER PREPARATION FOR INCLUSIVE EDUCATION AND EFFECTIVE SUPPORT IN BOTSWANA

3.1 INTRODUCTION

This chapter considers the move towards the alignment of teacher training with inclusive education and effective support in Botswana. The researcher strongly feels that aligning teacher training with inclusive education and concomitant support is a core value of high quality educational programmes for all learners. As it was noted in the previous chapter, high quality and efficiently trained teachers should make for effective teaching and learning within an inclusive system of education. The product of such a system will contribute to the realisation of the country's goals. For instance, in Botswana it may result in the country achieving its goal of an "Educated and Informed Nation" by 2016 (Vision 2016, 1997). This chapter briefly surveys the general background of special or inclusive education and teacher training, challenges to the development of inclusive teacher education in training institutions, as well as the current status of inclusive education and concomitant support.

3.2 GENERAL BACKGROUND OF SPECIAL/INCLUSIVE EDUCATION AND TEACHER TRAINING

Botswana has undergone processes of change and development in special or inclusive education and teacher training. The changes and developments were in most cases responding to the different stages and reforms in education and support for those learners experiencing barriers in learning and development. Botswana also responded to global agendas on special or inclusive education and support. For example, the Botswana government was influenced by the International Year of Disabled Persons of 1981 that facilitated the integration of learners experiencing barriers to learning and development in ordinary schools (Report of the National Commission on Education, 1993:309). Furthermore, the country responded to the UNESCO Project Seminar that was held in Gaborone in 1985. The project aimed at

sensitizing African countries on the educational needs of learners experiencing barriers in learning and development (Zindi, 1997:66).

In addition, Brandon (2006:37) is of the opinion that Botswana, like many other countries was influenced by organizations such as the United Nations Standard Rules on the Equalization of Opportunities for Disabled Persons (1993) and the UNESCO Salamanca Declaration and Framework for Action (1994). Gaotlhobogwe (2008:2) also found that the Education for All conference in Jomtien in 1990 made countries to review both the quantity and quality of educators to enable learners universal access to quality education. In support of this, Dart (2007a:12) states that the changes reflect the fact that Botswana is a signatory to a number of international declarations that call for more inclusive education systems. The author cites The Salamanca Statement as an example. This statement challenges and encourages countries and states to restructure schools in order to accommodate all children regardless of their physical, intellectual, social, emotional, linguistic or other conditions. This should include disabled and gifted children ... and children from other disadvantaged or marginalised areas or groups+ (UNESCO as cited in Dart, 2007a:12).

3.2.1 POLICY AND LEGISLATION

The policy and legislative provisions for learners experiencing barriers to learning and development should be solidly anchored in the commitments made to Education for All+ and equity in opportunity for every child (Porter, 2001:14). According to Mbengwa (2006:85) the Botswana government is committed to education for all. Dart (2007a:11) has also reported that following independence, Botswana has made a move to increase access to education for the population. In attempting to realise education for all, a number of efforts have been made and one of those was to improve the quality of teacher training programmes. Policies and documents such as Education for Kagisano (1977); the Revised National Policy on Education (RNPE, 1994); the Report of the National Commission on Education (1993); Vision 2016 (1997) and National Development Plan (NDP 9, 2003) served as yardsticks and operational guides in improving equal access to education.

3.2.1.1 Education for Kagisano of 1977

Education for Kagisano was the country's first national policy on education (1977). This policy can also be seen to have motivated the Botswana government to practice a more inclusive system of education. The researcher is supported by Dart (2007a:13) when stating that the policy could quite as easily be used to justify moves towards a more inclusive model of education.

The 1977 education policy emphasised that the education system should be based on *Kagisano* . a concept that depicts and embraces social harmony. In fact, the Botswana education operates along the national principles of democracy, development, self-reliance, unity and *botho* (%am because we are+) prescribed in the same policy. With regard to these principles, the country aims to provide equal educational opportunity and support to all learners, including those experiencing learning barriers. Dart (2007a:13) asserts that an education system based on these principles surely has no choice other than to be inclusive, and it is clear that pre-service training, in-service training and general discussion in education communities could make more constructive use of these. In particular, the *botho* pillar shows the country's commitment towards acceptance of all people, regardless of the differences that may exist. Accepting people of different qualities and abilities necessitates provision of appropriate and adequate support and quality training of teachers, and is one of the strategies that can be employed to facilitate this.

Regarding teacher training, the policy emphasises that teachers should have the right competencies so as to provide quality teaching to learners. It is stated in the policy that the quality of teaching is the most important influence on the quality of the education provided in schools+ (Education for Kagisano, 1977:127). It was also made clear from the policy that a teacher training curriculum should enable teachers to operate along the aforementioned national principles. In fact, the policy indicated a need to have teachers for widely, accessible junior secondary schools in future (which could mean teachers of this millennium) in that learners of diverse and unique abilities will be admitted in these schools (Education for Kagisano, 1977:155). Furthermore, the policy recommended improved professional support which was to be coordinated by higher authorities in the Ministry of Education. In particular the higher authorities were to be engaged to a greater extent in matters that affected the education service with regard to working conditions in schools and the education

policy for example. Teachers were to be consulted in all these matters as well as in the overall work of curricular reform (Education for Kagisano, 1977:133).

When accessing the policy, one may agree with the researcher and Dart that the policy paved the way towards inclusive education and appropriate support to learners experiencing challenges in their education. The Report of the National Commission on Education (1993:307) however argues that although the 1977 education policy declared universal access to basic education, its provision to learners experiencing barriers to learning and development remained largely unrealized. Moreover, Dart (2007a:12) asserts that support and provision to learners experiencing barriers to learning and development did not receive explicit attention until the second policy on education of 1994, which also addressed issues of inclusive education and support.

3.2.1.2 The Revised National Policy on Education (RNPE, 1994) and subsequent reports

The RNPE is the second national policy on education. It came as a result of the recommendations of the Report of the National Commission on Education of 1993 and was tasked with laying down policy guidelines and strategies for future educational development (RNPE, 1994:1). In particular, chapter 9 in the Report of the National Commission on Education of 1993 addresses issues of special education and support to learners experiencing barriers to learning and development. According to Dart (2007a:12) the report puts emphasis on the integration of learners experiencing barriers into ordinary schools so that they are prepared for social inclusion. Moreover, learners with severe challenges should access learning in special units attached to ordinary schools, or catered for abroad if their needs cannot be met within the country.

With regard to special education and support, the RNPE stipulates goals. The goals were considered to be steering inclusive education and support and were as follows:

- To ensure that all citizens of Botswana including those with special needs have equality of educational opportunities;
- to prepare children with SEN for social integration by integrating them as far as possible with their peers in ordinary schools;

- to ensure a comprehensive assessment that is based on the child's learning needs, and not on group norms, and which is followed by individualized instruction;
- to promote the early identification and intervention which will ensure the maximum success of the rehabilitation process and
- to ensure the support and active participation of the children's parents and community through an education and information campaign (Dart, 2007a:13; International Bureau of Education, 2001:6; RNPE, 1994:38).

In addition, from the same policy, there were specific recommendations to facilitate the realisation of the aforementioned goals, and therefore effective implementation of inclusive education and provision of support. Dart (2007a:13) is of the opinion that there were three key recommendations for making education more inclusive.

- Recommendation 92b states that at least one senior experienced teacher in each school should be appointed to be responsible for the handicapped learners. This teacher should ideally be a member of the SIT and should organize special remedial tuition for learners with specific learning problems. With time, these posts should be filled by trained special education teachers (Dart, 2007a:13, RNPE, 1994:40).

This could lead to effective inclusive education and provision of support in that the support for both learners and teachers may to some extent be facilitated from within, rather than often relying on external support. Support from within a school may reduce costs, and minimize difficulties experienced by schools in trying to access support services from outside (Mbengwa, 2006:76); it may also lead to early identification and intervention. Furthermore, if the senior teacher is committed, this may lead to increased responsibility of individual schools to include and support learners and related systems within the inclusive system of education.

However, there have been inequalities with regard the implementation of this recommendation. According to Dart (2007a:14) a significant number of primary schools have a Senior Teacher: LD; however, an insignificant number of these educators have specific training with regard special education and there are only a

few active SITs in primary schools. On the other hand, a handful of SITs exist in junior secondary schools.

- Recommendation 95a states that all teachers should have some elements of special education in their pre-service or in-service training. Those who have not received such training during their pre-service courses should receive it during in-service training (Dart, 2007a:14; RNPE, 1994:42).

This recommendation seems to be highly appropriate to Botswana's situation. Provision of special or inclusive education and support services in the country has been a challenge because of a lack of and inadequately trained personnel (Mbengwa, 2006:102; Report of the National Commission on Education, 1993:316). The implementation of this recommendation would in a way address the said problem and therefore may lead to successful implementation of inclusive education and provision of support. It is also appropriate in that within the inclusive education system, every teacher is a teacher of learners experiencing barriers to learning and development and with the knowledge and skills acquired either through pre-service or in-service training teachers will be in a better position to support those learners requiring support services.

- Recommendation 95b states that most special education teacher training should be broad-based, rather than focussing on a single disability (RNPE, 1994:42).

Broad-based training allows teachers to support learners with diverse needs and also enables them to address learner barriers holistically (Mbengwa, 2006:72). In addition, Hay (2003:137) asserts that educators for the 2000s should be trained in the eco-systemic perspective of special needs ... He /she should have excellent skills to work with learners on an individual basis as well as a group basis. Furthermore, such a member should have outstanding skills to work with and influence adults involved in learners' lives. Social psychological knowledge and skills as well as multicultural sensitivity are, in effect, required ... It has been argued that specialist training (medical model) limits services in the educational system (Ranjan, 2000:1). On the other hand, Dart (2007a:14) has highlighted that moving away from the previous medical model to a more broadly inclusive/eco-systemic training has

proved to be a challenge for the education sector, and implementation of the specific recommendations of the RNPE of 1994 has been sporadic for this reason.

The conclusion made by Letsholo, Mogotsi, Sebina, Molelo, Solomon, Kgwefane, Matenge, Yandila and Motshidisi (2003:14) is that the RNPE is complemented by the Botswana Vision 2016 which views education as a fundamental human right. According to the aforementioned authors, Vision 2016 and the RNPE seem to be in harmony in aiming to build an educated and informed nation (Letsholo et al., 2003:14). In particular, the following pillars in the Vision call for the nation that is inclusive in all respects, education being one of those.

- **An Educated, Informed Nation** . puts emphasis on good quality education that is aligned with the changing needs of the country as the world around changes. It recognises that there should be equality of educational opportunities to all citizens and that there is need to improve access to education for all (Masenge, 2003:3; Vision 2016, 1997:5);
- **A Compassionate, Just and Caring Nation** . includes issues of concern such as the welfare of people with disabilities. It also embraces the fifth national principle of *botho* which calls for concern for the needy (Letsholo et al., 2003:18) and
- **A Moral and Tolerant Nation** . seeks to encourage tolerance among people. Regarding this pillar, no one should be disadvantaged because of his/her difference. It is stated in the vision that the future Botswana will have eradicated negative social attitudes towards the status and role of ... the disabled+(Vision 2016, 1997:11).

The RNPE is also supported by the National Development Plan (NDP 9) objectives. From this government document the spelt out objectives put emphasis on improved education and implementation of inclusive education and provision of support. Examples of those objectives are to:

- Develop special education as an integral part of the regular education system to promote inclusive practices;
- increase access and equity to education and training for learners with special educational needs and

- continue to provide advice and support to other Ministry of Education departments and Ministry of Local Government of relevant policies and inclusive educational programmes and establishment of special education programmes (NDP 9, 2003:302-3).

It is also stated in the NDP 9 (2003:303) that efforts will be intensified to establish SIT programmes in schools to meet the educational needs of learners experiencing barriers to learning and development.

Having looked at policy, legislation and related government reports, it is evident that the Botswana government is aiming for a more inclusive and supportive education. It is however important to realise that it is not only through policy that inclusive education and support can be achieved. In addition to good policy and legislation, the government is tasked with its implementation to enable effective structures and mechanisms towards inclusive education and ESS. Dart (2007a:23) is of the opinion that inclusive education and support necessitates changes in structures, methods of working, allocation of resources, and challenges to received wisdom that are beyond the scope of individual teachers to sustain. According to Zindi (1997:45) qualified and well-equipped personnel leads to effective implementation of good legislation and policy. The next aspect will therefore address special or inclusive education and teacher training in Botswana.

3.2.2 SPECIAL OR INCLUSIVE EDUCATION AND TEACHER TRAINING

In Botswana, the Revised National Policy on Education (RNPE 1994:42), states that all teachers should have some elements of special education in their pre-service or in-service training. Those who have not received such training during their pre-service courses should receive it during in-service training. It is with this idea in mind that efforts are being made to overhaul teacher education in order to achieve well balanced and effective teacher training programmes. This will ensure that teachers are taken on board in as far as inclusive education and support is concerned. These teachers need appropriate knowledge and skills in order to achieve the aims and objectives of an inclusive system of education. In fact, as argued in the Curriculum Report Card (2000:36) teacher education and professional development need to include a curriculum development focus that helps teachers

understand both curricula and the processes involved in supporting learning. Gaotlhobogwe (2008:1) concludes that in Botswana most of the schools are engaged with or desire to practice inclusive education. Accordingly there is a need for improved training methods and proper placement of teachers to accommodate inclusion. This can be done by providing proper pedagogical preparation, and producing prospective teachers to fully accommodate students with Special Needs+. The Botswana policy on teacher education might be seen to have been influenced by The Salamanca Statement that urges both governments and the world community to promote inclusive education and to include special teaching methods as a component in all teacher training programmes (Sida & Cooperation, 2000:10).

Teacher training in Botswana is done in primary colleges of education (Lobatse, Tlokweng, Francistown and Serowe); secondary colleges of education (MCE and TCE) and at the University of Botswana; however, the overview that follows will only focus on primary and secondary colleges. The latter was not included in the overview because it trains teachers for all levels (primary, junior and senior secondary). Furthermore, at the time of the study, the researcher did not have much information with regard to special education at the university, whether it has pre-service or only in-service training in the area. Distance also became a barrier in trying to solicit information from colleagues at the university.

3.2.2.1 Overview of special or inclusive education teacher training in colleges of education

Both primary and secondary teacher colleges of education offer a diploma in general teacher training which runs for three years. A special or inclusive education component is included in the diploma programme as per recommendation 95a of the RNPE of 1994 (cf. 3.2.1.2). As a result of the said recommendation, all colleges of education have since introduced special needs education as part of the education and method courses (International Bureau of Education, 2001:6). The main focus of introducing special education in teacher education was to create awareness with a view to enabling teachers to identify learners with special educational needs and to work collaboratively with special education teachers (International Bureau of Education, 2001:6).

The study by Gaotlhobogwe on *“Inclusive education – a challenge to the teacher preparation and policy implementation in Botswana”* reveals that teacher trainees of primary colleges of education are exposed to general and specialisation courses in special education. General courses are done as from the second year, while at third year specialisation courses in visual and hearing impairment, speech and language problems and mental retardation are covered.

The general aim of exposing teacher trainees to the special education course as spelt out in Diploma in Primary Education (DPE) syllabus (1999) is to enable trainees to explore practical ideas and theoretical knowledge that will help them to plan and use various child-centred teaching methods suitable for learners with special needs integrated into primary classes. They will analyse and critique various teaching methods for learners with special needs, so that they can provide leadership in the development of special education at their places of work. While doing courses in the four selected areas, namely visual and hearing impairment, mental retardation or learning difficulties and learning disabilities, they are expected to acquire specific knowledge and skills that would allow them to effectively support learners experiencing challenges in the four respective areas in the field. Refer to Table 7 for examples.

Table 7: Components, knowledge and skills in special education at primary colleges of education (DPE special education syllabus, 1999)

Component	Knowledge and skills
Visual impairment	Assess children with different degrees of visual impairment; Describe causes and prevention of visual impairment; Apply methods of communication skills to children who are visually impaired; Acquire and employ methods of teaching mobility and activities for daily living (ADL); Use various Braille equipment efficiently; Provide a conducive learning environment for children with visual impairment; Use educational methods suitable to different degrees of visual impairment; Produce and use appropriate teaching aids for children with visual impairment; Keep records of children who are visually impaired.
Hearing impairment	Describe causes and prevention of hearing impairment ; Describe and demonstrate the techniques of assessing hearing loss; Describe and explain functions of speech and speech organs; Demonstrate practical use of hearing aids and other electronic technical equipment; Describe and use different types of communication approaches to meet the educational needs of children with hearing impairment; Monitor progress on the child’s all round development.

Mental Retardation	Identify children's abilities and problems; Describe and apply methods and strategies suitable for children with different levels of mental retardation; Describe and use approaches and strategies of teaching children with learning difficulties; Design and use teaching/learning aids for children with learning difficulties; Describe and apply methods for dealing with children with behavioural problems.
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In secondary colleges of education special education is offered to all trainees as a competency-based subject. Trainees specialise in general subjects (example Mathematics, English, Business Studies) and not in special education. As from the year 2001 teacher trainees of secondary colleges of education were exposed to the special education course. Trainees have one contact hour per week over their three years of study for Diploma in Secondary Education (DSE). The subject is done on broad-based mode . where trainees are exposed to a general introduction to the area of special education. In effect, recommendation 95b of the RNPE (1994:42) states that %most special education training should be broad-based, rather than focusing on a single disability.+The programme is aimed at:

- Equipping trainees with knowledge of the existence and types of SEN;
- equipping trainees with the observational skills plus some basic intervention skills to identify learners with SEN and the community resources available for such learners;
- highlighting the importance of early intervention among pre-school and school age children to minimise the effects of various disabling conditions and
- developing trainees' interests in further training in areas of SEN.

The general objective of the course as stated in the syllabus is that on completion of the DSE programme all trainees will have been made aware of different types of SEN and will have been equipped with skills to observe, identify and cater for learners with SEN within the classroom (Dart, 2007a:14). The components of the special education course are reflected in Table 8.

An overview of special or inclusive teacher training in institutions reveals that teacher trainees are helped to learn and acquire various important competencies and skills that may assist them to successfully support learners experiencing barriers to learning and development within the general inclusive system of education. It is however important to note that teacher training institutions (MCE & TCE) in

Botswana face a number of challenges in the development of an inclusive teacher education. Some of these challenges are discussed next.

Table 8: Components, knowledge and skills in special education at secondary colleges of education (DSE special education syllabus, 2000; Dart, 2007a:14).

Year group	Term, component (s)	Knowledge and skills
1	1, Introduction	List and discuss elements of the Special Educational Syllabus; Discuss trends prevalent in the History of Special Education in Botswana; Discuss, explain and critically analyse the agreed Government Policy on Special education in Botswana; Describe and discuss various attitudes towards disability in Botswana.
	2, Types of (SEN) 1	Report on causes, characteristics, assessment and implications for teaching SEN (pupils with Learning Disabilities; Social and emotional development; Developmental difficulties: spatial, conceptual; Academic difficulties, specific learning difficulties; Literacy problems; Numeracy problems, Pupils with Mental Impairments; Gifted and/or talented pupils).
	3, Types of (SEN) 11	Report on causes, characteristics, assessment and implications for teaching of SEN (pupils with Sensory impairments; Visual impairments; Hearing impairments; Physically impaired pupils; Pupils with Communication disorders).
2	1, Observation	Able to state and explain the different components of the SHEEP model and shadowing as examples of child observation; Equipped with the skills to enable them to undertake an observation exercise during teaching practice which will require them to observe a child, record observations and make evaluations leading to possible identification of Special Educational Needs and possible intervention strategies.
	2, Consolidation 1	Describe, discuss and evaluate the major arguments involved in the issue of mainstreaming; Identify the major areas of access concern, i.e. geographical access, social access and curriculum access; Suggest practical examples of how geographical, social and curriculum access can be improved for pupils with Special Educational Needs; Make instructional plans, which reflect mixed abilities in a classroom setting; Be aware of the present referral systems available in Botswana at school, regional and national level, and how to process such referrals; Be aware of the handicapping role of the environment, and to describe the consequences of that for a particular child.
	3, Adaptation exercise Major Subject	Create/produce examples of differentiated material; Adapt pupil learning materials in the student's major subject area.
3	1, (IEP)	Define what is meant by an IEP and describe major components of an IEP; Design an IEP exercise during teaching practice; Implement an IEP exercise during teaching practice.
	2 & 3, Consolidation 11	Describe the general trends in Special Education, referring to the past, present and future and their implications for Botswana; Identify and analyse relevant literature pertaining to Special Education; Identify and use community resources and networking, locally, nationally and internationally.

3.3 CHALLENGES TO THE DEVELOPMENT OF INCLUSIVE TEACHER EDUCATION IN TEACHER TRAINING INSTITUTIONS

It is acknowledged that the special education teacher training offered in specified secondary institutions constitute a substantial move towards inclusive education and support. It is also important to acknowledge that there are existing challenges to the development of inclusive teacher education in Botswana. The identified challenges may not be common to the two institutions (MCE & TCE) since in addition to literature the researcher used her observations, experience and information from colleagues to establish those.

3.3.1 LONG OVERDUE SYLLABI

It has been observed that the syllabi used in training institutions have not been reviewed for long. In secondary training colleges, for example, the current syllabus has been in use since 2001. There is a possibility that some of the aspects included in the syllabus do not facilitate inclusive teacher training. According to Moremi (2008:1), head of the special education department at TCE the current syllabus has been in use for the past six years. It needs to be revised so that teacher trainers keep abreast with what is going on in the world of academics. Molosiwa (2008:2), the external moderator for secondary colleges of education for year 2008 also supports the review of the current syllabus when stating that ~~it~~ it has been used for six years without review, it is overdue for such a review to be undertaken. With the world emphasising inclusive education, Botswana needs to have a broader, and a more encompassing SNE curriculum. Other health impairments such as chronic diseases like asthma or cancer and HIV-AIDS need to be incorporated in the existing teacher-training curriculum+.

3.3.2 USE OF TERMINOLOGY

According to Molosiwa (2008:1), there is evidence that some teacher trainers use old terminology, for example, ~~mainstreaming~~ in place of ~~inclusive education~~ or ~~inclusion~~. She further mentioned that teacher trainers need to understand the need to be on the bandwagon as other special education professionals across the globe

on issues that are international unless there is a good reason for choosing a different word.

In as much as governments aim to provide inclusive education, all structures need to adhere to inclusive principles and practices, for example, the use of appropriate terminology. This is because the terms used have different connotations regarding support to those learners in need. In fact, terminology may indicate where an individual or country is placed with regard to support to learners experiencing challenges. The importance of appropriate language is encouraged globally. For instance, Salend (2005:27) found that in 1990 the term *handicapped* was replaced with the term *disabilities* in the IDEA because the Congress recognized the importance of language. The questions asked, included: what do the terms *regular*, *normal* and *special* imply? How do these terms affect the way we view learners experiencing barriers and the programmes designed to meet their needs? Do these terms foster inclusion or segregation? South Africa also has indicated the importance of using appropriate terminology. The Consultative Paper 1 (1999:9) highlighted that terminology can have the effect of labelling learners, discriminating against them, neglecting them, and ultimately creating a culture of non-acceptance of diversity. As a result the same documents proposed the adoption of a new terminology that would be consistent with the country's aim on inclusive education and support.

In the case of teacher trainers and trainees it is important that proper terminology is used all the time to avoid confusion on the side of teacher trainees and also to encourage them to pay much attention to the current form of provision and support as mandated by the inclusive system of education. Teacher trainers need to instil appropriate knowledge to teacher trainees to enable them to adopt a different mindset with regard to learners experiencing challenges and to function effectively when they get into the field. It may be also necessary to note that if teacher trainers use inappropriate terminology, they are themselves are unlikely to practice inclusive pedagogies. The question will then be: how is it possible for these trainers to produce inclusive teachers? Teacher trainers should be the leaders and practitioners of change . they need to mirror inclusive practices. Nordlund (2002:1) mentions that terms such as *mainstreaming*, *integration* and *inclusion* are often used synonymously, but their technical meanings differ. By clarifying the differences

between these terms, teachers and parents can better determine the goal of the educational programme.

It is important to note that the Botswana government acknowledges the use of appropriate terminology. For example, the term *integration* was used in the RNPE of 1994 while the term *inclusion* got emphasis through the NDP 9 of 2003. According to Dart (2007b:58) several specific objectives appear in the NDP 9 but perhaps the feature of most is that the language has changed between the RNPE and NDP 9 from that of integrated education to that of inclusive education.

3.3.3 STAFF EXPERTISE

The observation made is that a significant number of special education staff has not been trained in inclusive education and support. For example, at the institution where the researcher is based there are four lecturers for special education and only one has training in the area of inclusive education and support. This is a great challenge to lecturers and inclusive teacher training at the colleges. It could be one of the reasons for use of inappropriate terminology as described in chapter 3.3.2.

The lack of training and expertise in inclusive education may make teacher educators to revert to using the methodology and experiences they went through during their special education training. Dart, Chadwick, Davis and Molefe (2007:28) quote Tafa who expressed a feeling that the colleges themselves are stuck in the behaviourist groove ... it actually prepare students in a manner that is no different to that which they experienced in school themselves. The finding by Whitworth (undated) is that the current teacher trainers themselves did not get greater exposure of teaching learners with diverse needs and learning barriers because during their studies and teaching years in ordinary schools learners who experienced learning challenges were segregated from the general education setting. Will this type of trainers produce inclusive teachers?

Furthermore, teacher trainers have limited skills in some areas . hence they do not feel competent to equip their trainees with the relevant knowledge and skills in those areas. The study conducted by Gaotlhobogwe (2008:3) confirmed that special education lecturers from the training institutions lacked skills in certain areas. For example, they had limited skills in training an individual with low vision. The lecturers

thought this was due to the different specialisation areas that they possess from their training. Moreover lecturers also revealed that they differed in their area of specialisation and as such there was no consistency in the strengths of skills that trainees graduated with from respective institutions (Gaotlhobogwe, 2008:3).

Molosiwa (2008:2) expressed a concern on lecturer numbers and expertise, namely that they are both inadequate. The moderator suggested that more lecturers should be recruited and depending on what areas in special education are emphasised, there is a need to have each lecturer specialising in a specific area or at least having done inclusive education, which in principle should have covered various components.

3.3.4 LACK OF TRAINING RESOURCES

Lack of training resources (e.g Braille, hearing aids books, special computers) in teacher training institutions is a huge challenge regarding quality training of inclusive teachers. In certain institutions there are no resources that can be shown to teacher trainees and also used for demonstration. This is confirmed in the NDP 9 (2003:272) and it is stated that during the NDP 8 plan period, a number of projects aimed to improve and upgrade quality of teaching facilities in colleges of education could not be implemented due to a shortage of financial resources. The question is then how are teacher trainees expected to cope with the situation when they get to the field if they do not know and understand how equipment is operated? The study by Gaotlhobowe on *perceptions on inclusion of low vision in Botswana* reveals that some teachers at primary level lacked knowledge on the resources used. Specifically Gaotlhobogwe (2008:4) states that %~~it~~ was difficult to tell whether the magnifier was a stand or hand-held type but it appeared something was missing. Teachers were also not aware that something was not right with the magnifier.+

Moremi (2008:1) states that lack of resources poses a great challenge to the special education department at TCE in that there is no specialised equipment that could be used to enhance instruction. Special education has specialised equipment such as Perkins Braille, brailed books and many other resources that can be used to enrich instruction delivery, and all these are not available at the college. The recommendation by the external moderator Molosiwa (2008:2) was that a special

education laboratory with the specific equipment for the different specialisations is a necessity if teacher trainees taking special education are to see the value of the course. This implies that the trainees' motivation to do the special education course may be threatened due to lack of the necessary resources . and without motivation it may be really difficult to achieve the goal initially intended.

3.3.5 THE PROGRAMME WEIGHT

Like it has already been noted in chapter 3.2.2.1, teacher trainees in primary colleges are introduced to special education in their second year on general grounds and only specialise in their completing year. The discussion between the researcher and a colleague from one of the primary colleges revealed that the time allocated to special education does not allow teacher trainers and trainees to successfully cover the special education aspects as spelt out in the syllabus. Furthermore, it was revealed that less time is given to practical aspects while theory takes much of the time.

In secondary colleges (MCE & TCE), the course is done for awareness purposes. The course offers a broad introduction to the area of special education. An individual trainee has one contact hour per week for the course over three years of the study programme (Dart, 2007a:14). Comparing the amount of content stipulated in the syllabus, this time seems to be inadequate to cover all the content. Covering less content makes it difficult for graduates to perform when they get to the field. This argument is supported by Zimba et al. (2007:46) who established that in Namibia teacher training programmes for senior secondary school teachers did not fully equip trainees with the needed knowledge and skills. This is because the programme content is limited, and as a result teachers who go through this programme are insufficiently prepared to handle senior secondary school learners experiencing barriers to learning and development.

Unlike in primary colleges, the special education course is not examinable and this makes it very difficult to convince trainees that the course is as important as others for they still have rooted traditional beliefs about examinations . that without examinations the course is not important and therefore it is not worth spending time studying such a course. It is even more taxing if the subject is not included in the

examination transcript like is the case in other institutions. Moreover, during teaching practice, teacher trainees concentrate on their specific subjects in which they specialise. They are assessed in their specialist subjects and not special education. This makes it even more difficult for special education lecturers to show teacher trainees the importance of the special education course. In fact, teacher trainees are mostly exposed to theory as compared to special education practice. The researcher is aware that the course is only for awareness purposes but strongly feels practicing the knowledge and skills acquired will have a great impact in as far as inclusive education and teacher training is concerned.

Despite the said challenges, teacher trainers are expected to produce teachers with competencies and skills in special or inclusive education that will help them to successfully provide effective support in ordinary or inclusive schools.

Following is a section that deals with the current status of inclusive education and ESS in Botswana.

3.4 THE CURRENT STATUS OF INCLUSIVE EDUCATION AND EDUCATION SUPPORT SERVICES

3.4.1 EXAMPLES OF LEARNERS RECEIVING SUPPORT IN SCHOOLS

3.4.1.1 Learners with learning “disabilities”

Learning disabilities have only recently been recognized as disabilities, according to Tsheko and Okumbe (2004:104). These learners may experience difficulties in organizing information received, remembering it, and expressing information; it therefore hinders the learners' capability on basic functioning in aspects such as reading, writing, comprehension and reasoning. Learning disabilities may manifest themselves as dyslexia, dyscalculia, dysgraphia as well as visual and auditory difficulties (Tsheko & Okumbe, 2004:104, Okumbe, 2006:2).

Learners experiencing learning disabilities in Botswana are assessed in order to determine their functioning level. They are included in ordinary schools and teachers organize remedial teaching to enable them to better access the curriculum. Individual schools are expected to develop IEPs with the support of the Senior Teacher Advisor . Learning Difficulties (STA . LD) (MoE in Mbengwa, 2006:96; UNESCO IBE,

2006:28). Furthermore, these learners follow the same curriculum and sit for the same examinations as the ordinary school learners (MoE in Mbengwa, 2006:96). Some scholars have also worked on how best the same learners could be supported to access the general curriculum. Molosiwa, Mukhopadhyay and Moswela (2008:3) for example used the model of Wehmeyer et al. and suggested that the same model can be used to help learners with learning disabilities in Botswana (refer to Table 9). In their study to determine the feasibility of the model in the context of Botswana the researchers put emphasis on three steps that need to be followed in order to make the curriculum accessible to learners with learning disabilities. They include curriculum planning and design, Individualized Education Planning and school-wide implementation of high quality instructional strategies.

Step 1: Curriculum Planning and Design . the researchers emphasise that it is important to begin with a curriculum planning and design process to ensure learners access to the general curriculum. According to Molosiwa et al. (2008:4) curriculum planning and design can be achieved through the in-built principles of universal design which include equitable use; flexible use; simple and intuitive use; perceptible information; tolerance for error; low physical and cognitive effort (Wehmeyer et al. in Molosiwa et al., 2008: 6). As Molosiwa et al. (2008:4) state, universal design takes into cognizance the heterogeneity of learners with learning disabilities; for this reason learners unique learning needs are met. The researchers are of the view that alternative assessment or open-ended standards as in the model (Table 9) can be utilized in evaluating the learners progress in terms of content knowledge. Wehmeyer et al. (in Molosiwa et al., 2008:4) assert that open-ended standards are more consistent with a universally designed curriculum as they make sure that more learners . even those with learning disabilities . can show progress in the general education curriculum.

Step 2: IEP . this is of paramount importance in the general education curriculum. It has been suggested that IEP should take cognizance of the knowledge of the general education curriculum for learners having the same characteristics (age, grade) as the learner for whom the IEP is drawn. Moreover, there should be information about the learners unique needs and such information should be obtained from a number of stakeholders and assessment sources (Wehmeyer et al. in Molosiwa et al., 2008:4). Westwood (1997:7) is of the opinion that when designing

an IEP for a learner, there should be a clear indication not only of what the learner needs to do which is different from the rest of the class, but also the areas of the curriculum where the learner can be counted with others. This is supported by Molosiwa et al. (2008: 5) when stating that there should not be a special curriculum for a learner with learning disabilities, instead the learner should have the opportunity to progress and participate in the general curriculum with accommodations or curriculum modifications.

Step 3: School-wide implementation of high quality instructional strategies . this puts emphasis on the use of instructional strategies that will enable maximum participation of learners with learning disabilities, for example, Wehmeyer and Agran (in Molosiwa et al., 2008:5) suggest the use of learner-centred instructional methods. The advantage of using learner-centred instruction is that it allows for acquisition of skills, competencies and knowledge required by the general education curriculum. Examples of learner-centred instructional strategies include the inquiry-based approach, the thematic approach, concept-mapping, cooperative-learning, peer-tutoring, role play, simulations and discussion (Schirmer in Molosiwa et al., 2008:4; Ashmen & Elkins (1998:162). These approaches improve academic performance not only for learners with learning disabilities, but rather, all learners, benefit. Engelbrecht and Green (2001:50) argue for instance that approaches to learning that involve learner-to-learner support can be effective in creating classrooms that encourage the participation and learning of all learners.

The school-wide implementation of high quality instructional strategies goes well with what is called school-wide materials and instruction in the multi-level model. In this model, emphasis is also put on the use of appropriate instructional methods which challenge all learners to progress in the general curriculum. The recommendation by Molosiwa et al. (2008:5) is that teachers should make wise choices of methods that would blend well with learners' individual learning needs. Furthermore, researchers strongly feel that in-service training should be refocused in order for teachers to acquire skills that would enable them to relate well with learners and issues on the impact of context in the teaching of learners with learning disabilities. More about the multi-level model is explicitly reflected in Table 9.

Table 9: Steps to gaining access to the general curriculum for students with learning disabilities. A Multi Level Model (Wehmeyer, Lance & Bashinski in Molosiwa et al., 2008:3)

Action step	Description
Standard Setting and Curriculum Design	Standards are written open-ended. Curriculum planned and designed processes are informed by principles of universal design to promote progress in the general curriculum.
Individualized Educational Planning	Designing IEPs is shaped by the general curriculum taking cognizance of the student's individual unique learning needs.
School-wide Materials and Instruction	Curricular materials are universally designed and the school uses instructional strategies which challenge all students to progress in the general curriculum.
Partial School and Group Instruction	Targeting students who require intensive assistance. Developed instructional practices built into the lesson, unit, and classroom to facilitate student's ability to progress and participate in the general curriculum.
Individualized interventions	Ensuring progress in the general curriculum is actualized through additional curricular content and instructional strategies which harmonize well with student's learning needs not met by school-wide efforts or partial school efforts.

3.4.1.2 Learners with a mental retardation

Learners with a mental retardation develop at a slower pace as compared to their age level peers. According to Lewis and Doorlag (2003:249) and Okumbe (2008:3) mental retardation affects school learning, language and social development as well as vocational and independent living skills. The same learners are capable of learning but at a slower pace as compared to learners with average ability.

In Botswana, learners with a mental retardation are either placed in special schools, units, or ordinary schools. Currently, there is no specific curriculum for these learners and as such teachers individually modify and adapt the curriculum to accommodate the needs of the same learners who have mild conditions. Lewis and Doorlag (2003:249) support the effort made by these teachers and maintain that when learners with a mild mental retardation are included in ordinary classes, the ordinary teacher must often modify classroom procedures for academic instruction. Programmes for learners with a mental retardation are aimed at teaching learners activities of daily living that include self-help, social and communication skills. In addition, they are designed for basic academic skills such as reading, writing and

numeracy (UNESCO IBE, 2006:27). Lewis and Doorlag (2003:249) highlight that because learners with a mental retardation fail to learn and acquire skills fast, it is important that instruction focuses on important areas that will help them become self supporting adults.

To further support learners with a mental retardation in ordinary schools in Botswana, specialist teachers assist in integrating learners in ordinary classes and the said learners sit for examinations except those with severe or profound mental handicaps (UNESCO IBE, 2006:27). According to Lewis and Doorlag (2003:249) with the aid and assistance of ordinary and specialists teachers, learners with a mental retardation are able to successfully participate in many classroom activities. It is however, important to underscore that the individual needs of these learners must dictate how a specific educational programme is constructed. Moreover schools must base the education of learners with mental retardation on individual, and not system needs (Gargiulo, 2003:173).

3.4.1.3 Learners with a visual impairment

Visual impairment may affect central, peripheral, and night vision as well as colour perception, or general visual acuity (Tsheko & Okumbe, 2004:104). Learners with a visual impairment may be blind and partially sighted. According to Tsheko and Okumbe (2004:104) these learners may experience a visual impairment which may be anatomical or functional, partial or total, temporary or permanent, reversible or progressive and vary greatly from one learner to another.

Learners with a visual impairment in ordinary schools and classes in Botswana include those who are totally blind and those with low vision (Mbengwa, 2006:92; UNESCO IBE, 2006:27). They are screened, referred by hospital nurses to eye specialist doctors, and their medical conditions are attended to by ophthalmologists (MoE in Mbengwa, 2006:92). Moreover, learners are assessed at the Central Resource Centre (CRC) for functional vision and appropriate placement. In ordinary schools, the curriculum is adapted and modified to meet the needs of the said learners. Zindi (1997:21) claims that most experts see it fit for learners with a visual impairment to be included in ordinary schools, learn alongside their sighted peers provided the necessary modifications to meet their needs are in place. Furthermore, special support to these learners, consist of the use of Braille, large print, tape

recordings, assistive or adaptive technology and optical devices (UNESCO IBE, 2006:27).

However, Gaotlhobogwe (2008:3) concludes that limited facilities exist for learners with a visual impairment in Botswana. Moreover, the researcher reports that there are currently four schools with resource units for learners with a visual impairment, two of which are at primary, one at junior secondary and the other at senior secondary school level. Table 10 presents information showing teachers' engagement in supporting learners with visual impairment in ordinary schools.

Table 10: Teachers' activities in assisting learners with low vision (Gaotlhobogwe, 2008:3)

Ordinary schools with resource units	Ordinary schools without resource units
Encouraging students to use magnifiers	Enlarging print for students
Providing students with brailled text where they cannot access print	-
Enlarging print for students	-
Providing awareness to non-specialist teachers and sighted students	-

In addition to services provided by teachers in ordinary or regular schools, Matala (2002:7) reports that the Examinations Research and Testing Division collaborates with the Division of Special Education to edit, adapt, modify and transcribe examinations from print to Braille and vice versa.

3.4.1.4 Learners with a hearing impairment

Learners with a hearing impairment may consist of those who are deaf or hard of hearing. Those who are not able to use their sense of hearing even with the use of specialised equipment are referred to as deaf, while those with a significant hearing loss but are able to hear with the aid of special adaptations and specialised devices are said to be hard of hearing (Lewis & Doorlag, 2003:346).

Like learners with a visual impairment, these learners are assessed at the CRC and the assessment is for the purposes of determining hearing loss and level of functioning. They are further referred to an audiologist who may suggest the fitting of ear moulds and hearing aids. Agencies such as the Bamalete Lutheran Hospital and Rehabilitation Services Division in the Ministry of Health are engaged in referrals for

learners requiring further examinations (MoE in Mbengwa, 2006:92). In Botswana, learners with a hearing impairment access education in special schools and units for learners with a hearing impairment (MoE in Mbengwa, 2006:93). For example, the total number of learners catered for at schools (special units at primary & junior secondary schools) as of the end of 2004 was 291; it was however highlighted that a smaller number of these learners proceed to senior secondary school level (Dart, 2007:59). One may want to know why that occurs. From the said educational settings, learners with a hearing impairment follow the same curricula as their peers without hearing impairment. They are taught through Sign Language and Total Communication (Matale, 2002:6; UNESCO IBE, 2006:27); however, there are dissatisfactions that have been raised by scholars with regards to Total Communication. For example, it leads to a mismatch between signed and spoken language and it was also argued that Total Communication does not lead to success in academia (Engelbrecht & Green, 2001:153).

3.4.1.5 Learners with speech and language difficulties

Speech and language difficulties may interfere with the learner's ability to pronounce words or sounds, speech fluency, voice quality, the ability to understand the speech of others as well as to express one's own thoughts in words (Lewis & Doorlag, 2003:299). Salend (2005:81) is of the opinion that while the impact of speech and language disorders on learner's behaviours varies, these communication difficulties can interfere with their learning and their interactions with their classmates. Despite these challenges, a significant number of learners with speech and language difficulties remain in the general education classroom (Lewis & Doorlag, 2003:299).

This is the same in Botswana. According to the UNESCO IBE (2006:27), learners with speech and language difficulties are placed in ordinary schools except for those learners who may be experiencing other conditions that may include intellectual disabilities. They access the same curriculum followed by ordinary school learners, with modifications and adaptations of the curriculum where necessary (Mbengwa, 2006:95; UNESCO IBE, 2006:27). Other services provided to these learners include those provided by CRC in the form of therapy in stammering and articulation.

3.4.1.6 Learners with a physical impairment

Physical impairment may be congenital or acquired after birth through disease or injury. These can have grave, little, or no effect on school performance. Some of the learners with this condition require no special adaptations while others need only modification of the physical environment. Furthermore, it might be necessary to adapt instructional activities in the general education classroom or to provide special support in areas of need including mobility, communication and basic skills (Lewis & Doorlag, 2003:319).

In Botswana, learners with a physical impairment are supported through a joint effort of an occupational therapist, an educational psychologist, a rehabilitation officer and the itinerant teacher. These ESS professionals aim to enable, learners appropriate intervention, support, and placement at appropriate learning centres (UNESCO IBE, 2006:28). Furthermore schools are advised and supported on issues of accessing the curriculum, physical environment and any other related support required by the learners (MoE in Mbengwa, 2006:96; UNESCO IBE, 2006:28).

It is evident that the government has taken a broader step towards the provision of support to different learners within an inclusive system of education. On the other hand, the researcher did not establish through literature (Botswana) if the support is still rooted on the category of disability or on the level of intensity of support needed by an individual learner. The researcher is of the view that the latter will lead to more appropriate and effective support in that it will address both intrinsic and extrinsic barriers contributing to the learning and development processes. The conclusion reached however is that support offered to learners in schools is still on categorical basis. This is clearly reflected in Ch 3.4.1. examples of learners receiving support in schools.

In addition to learners, the government has found it appropriate and beneficial to extend support to those who are directly and/or indirectly involved in the learning and development of learners experiencing learning and developmental challenges. This is shown in the next discussion.

3.4.2 SUPPORT TO EDUCATORS AND PARENTS

The Botswana government found it necessary to further provide support to stakeholders directly or indirectly involved in the learning and development processes of learners experiencing barriers to learning and development. Such stakeholders include educators and parents. Educators are supported through pre-service and in-service training where they are equipped with the necessary skills to successfully identify and meet unique needs of learners in classrooms (Mbengwa, 2006:97-8). The support to educators at pre-service training is very important in that it helps educators to develop positive attitudes towards learners experiencing challenges in learning and therefore making it easier for inclusion (Matale, 2002:3). The in-service training in special education is also of paramount importance in Botswana in that many teachers, as in other countries, did not have special education training. This makes the provision of services to learners experiencing barriers to learning and development more challenging to such educators. The training includes short term courses and workshops as well as long term studies.

The support to parents is in the form of workshops on behaviour modification which target parents having children with learning disabilities and those with mental challenges. Parents are provided with this kind of support with the hope that they will continue with the intervention programme at home. It is evident from the MoE (in Mbengwa, 2006:99) that parents gain encouragement, inspiration, practical advice and information from others which then makes it easier for them to come to terms with their children's handicapping condition.

In conclusion, it is evident that the Botswana government has shown remarkable effort in the provision of support to learners, educators and parents within a system of education which is becoming more inclusive. On the other hand, with regards to support to learners, the researcher did not establish through literature (Botswana) if the support is still rooted on the category of disability or on the level of intensity of support needed by an individual learner. The researcher is of the view that the latter will lead to more appropriate and effective support in that it will address both intrinsic and extrinsic barriers contributing to the learning and development processes. The conclusion reached however is that support offered to learners in schools is still on

categorical basis. This is clearly reflected in chapter 3.4.1. examples of learners receiving support in schools.

It is important also to note that there are still challenges faced by the country in trying to achieve effective implementation of inclusive education and provision of ESS (Mbengwa, 2006:171). Some of those challenges will be discussed next.

3.4.3 CHALLENGES TO INCLUSIVE EDUCATION AND APPROPRIATE ESS IN BOTSWANA

3.4.3.1 Teacher attitudes

It has been reported that teachers in Botswana still have attitudes that do not facilitate effective implementation of inclusive education and provision of support. In fact, negative attitudes have globally been identified as a huge barrier in any form of attempt made to support learners experiencing challenges in an inclusive system of education. The research conducted by Brandon (2006:47) for instance, revealed that teachers in Botswana have negative attitudes towards educating learners with physical impairment. Brandon believes that the negative attitudes are due to inadequate training, and lack of expertise to teach and support those learners. In addition, Okumbe (2006:4) also concluded that the biggest challenge facing implementation of inclusive education in Botswana is that of changing teachers' attitudes and mindset regarding special needs learners and to train them to conceptualize and effectively implement inclusive practices. Still on the same note, Dart (2007b:62) shows a concern that the same teachers are reluctant to engage in the type of teaching and learning activities that would benefit a significant number of learners experiencing less severe conditions in the regular classroom. Dart (2007b:62) however cautioned that the meaningful inclusion of broad range of learners with SEN in the classroom is dependent on the mainstream teacher, their attitudes and skills.

3.4.3.2 Lack of resources

Effective implementation of inclusive education and provision of support is highly challenged by lack of the necessary resources, both material and human. Matala (in Chitiyo & Chitiyo, 2007:5) identified the shortage of special materials and equipment

in schools as one of the constraints retarding the progress towards inclusive schooling for children with disabilities in Botswana. This shortage of equipment is due to insufficient fund that can be used in acquiring the necessary resources (Matale, 2005:5). This makes it difficult for some learners to access the curriculum. In effect Chitiyo and Chitiyo (2007:64) quote Matale saying even if the children were to go to school, children with disabilities are particularly disadvantaged because schools lack the right facilities. The claim by Dart (2007b:62) is that the problem of lack of resources exists but sometimes is exacerbated by confusion as to who is responsible for what (e.g DSE, MoE, Ministries of Health and Local Government Lands and Housing, NGOs). Sebeso (in Dart, 2007b:62) states that there is still a need to specify roles and responsibilities between partners, educate, and monitor roles and responsibilities both at ministry and local levels. Secondly, Dart (2007b:62) also concludes that there is evidence of under-utilized resources which may arise due to a lack of the knowledgeable and rightful personnel to operate the equipment; and thirdly, there seems to be lack of imagination on how to utilise the available resources well or how to create low cost, locally available aids.

Educators have also been reported to be in short supply since not all educators have been trained in special education; those who had the opportunity to train in the area specialised therefore are unable to cater for many learners with various needs. The Report of the National Commission on Education (1993:16) makes it clear that specialising in one category of impairment leads to low skill mastery in adapting curricula to the whole range of learners experiencing barriers to learning and development. In effect, the shortage of qualified professionals in the area of special education has been identified as a major threat to the provision of special education in Southern Africa (Chitiyo & Chitiyo, 2007:64). In particular, Abosi (in Chitiyo & Chitiyo, 2007:64) reveals that there is an acute shortage of specialist teachers and lack of training facilities in Botswana. It has to be acknowledged however, that the compulsory special education training in colleges has made improvement in the area of human resources, however, it seems, there is still a lot to be done to reach a point when a significant number of teachers have had training in special education.

3.4.3.3 Lack of parental involvement

From experience as a secondary school teacher for nine years, the researcher observed that parents' participation in Botswana is very limited. Reasons attached to

this could be that some parents still do not see their role in the learning and development of their children. They still believe it is the responsibility of teachers. The other reason could be that parents lack information and knowledge especially on the area of special education and support. Okumbe (2006:4) argued that there is lack of public education to create awareness to those parents or guardians of special needs learners so that they can have a positive attitude towards assisting and helping these learners to develop their full potentials. In Botswana, there is still some stigma with regard to learners experiencing barriers. Some people believe %disability+ is a curse on the parents, to the extent that people end up keeping these children at homes rather than taking them to schools.

Parents may not participate in their children's learning due to the fact that they are unable to reach distant places where their children attend. Matale (2005:5) notes that parents may be interested to take part in the education of their children however they are hindered by long distances they have to travel to places where their children attend. For example, the available settings for learners with a visual impairment are limited, this means except for locals, learners attending in the same settings become residents or boarders at those, making it difficult for parents to visit the schools and collaborate with teachers in the learning and development processes of the same learners.

Lack of parental involvement has been felt not only in Botswana but in many African countries. It has been asserted that parental involvement is crucial in promoting positive outcomes of learners experiencing barriers to learning and development, %unfortunately, many African parents do not participate in the education of their children with disabilities+ (Gwala-Ogisi in Chitiyo & Chitiyo, 2007:65). Some explanations given to this lack of participation may include: lack of education and access to knowledge (Gwala-Ogisi et al. in Chitiyo & Chitiyo, 2007:65), a result of poverty and the lack of policies governing the delivery of special education in these countries (Chitiyo & Wheeler in Chitiyo & Chitiyo, 2007:65). Chitiyo and Chitiyo are of the opinion that whatever the reasons might be, lack of parental participation limits the effectiveness of special education services in Southern Africa (2007:65).

3.4.3.4 Low-density (sparse) communities

Botswana has sparse communities and this interferes with the country's effort to provide services to all those in need. According to United Nations Press Release (in Chitiyo & Chitiyo, 2007:64) the country has low-density communities because mostly it is a desert. The sparse arrangement of communities limits the provision of basic services, such as health and education, as government struggles to reach every community. Chitiyo and Chitiyo (2007:64) further note that in addition to constraining accessibility, efforts to reach the sparse communities also strain the government's already limited resources. With this current situation it is possible that some learners experiencing barriers to learning and development may continue school without the necessary support and as such experiencing exclusion in the name of inclusion.

3.4.3.5 School drop-outs

There is a significant drop-out rate from primary education; it is higher in some districts than others, and there are differences in attainment between urban and rural students. The drop-out rate is significant at junior secondary level and is higher in some districts than others (Dart, 2007a:11). From UNESCO IBE (2006:28) it is stated that Botswana's education system is faced with a serious problem of school drop-outs due to pregnancy. One may as well wonder if the reintroduction of school fees does not contribute to school drop-out. The researcher is aware that the government intervenes if parents prove themselves not capable of paying the said amount, which is currently set at P300 per year, but has a concern on parents' knowledge and understanding of this arrangement and parents' attitude towards the reintroduction of school fees. There is a possibility that if parents do not understand and do not have enough and appropriate knowledge on the arrangement and have a negative attitude, a number of learners will drop out from school. At some point families face a compromising situation of choosing who to sponsor, a normal child or a child with a disability. The fact is when families cannot raise money for school fees ... children with disabilities become first to stay home (Kabzems & Chimidza in Chitiyo & Chitiyo, 2007:63). As per the United Nations Press Release (in Chitiyo & Chitiyo, 2007:64), the introduction of school fees is likely to impinge on efforts by countries towards improved special education. It has been stated that the introduction of school fees is a dangerous step backwards and any short-term

budgetary gains from the re-introduction of school fees will have regrettable and inevitable economic and social costs in the medium and long-term+.

This is a challenge to inclusive education in that it is not always the case that all those who dropped out come back to be students again. This means that the number of school-aged children in streets will increase. It is also possible that others re-enter school. The challenge here might be the increase in the number of learners in a class, but large class sizes as highlighted in chapter 2 cause difficulties in inclusive teaching and support. Learners re-entering school require not only support in academic area, they may need emotional support as well. With the current state on the number of knowledgeable and qualified personnel, learners may not have access to the required services, with resultant learning breakdown. The researcher strongly feels that re-entering school puts a great challenge to both material and human resources available intended for inclusive education and provision of support.

3.4.3.6 Centralization of structures

According to Okumbe (2006:4), the CRC is the only assessing authority in the country and as such all the cases for assessment are referred to the centre. Dart (2007b:63-4) has a concern that the CRC assessment team in the Division of Special Education is woefully overstretched. The CRC has the responsibilities of identification, assessment and support across the entire country. This may lead to late or no identification and assessment of learners and may result in delayed or no support. Early intervention is of great importance in that it leads to successful support services. According to Malekpour (2007:84) early intervention programmes enables support personnel and parents to provide and implement comprehensive techniques. The recommendation by Dart (2007b:62) is that officers with assessment and support skills should be increased and deployed evenly across the country.

Botswana like many other African countries makes attempts to alleviate or at least minimize factors stymieing the progress of inclusive education and support. At this point the paper will show how the country has engaged itself in this matter.

3.4.4 STRATEGIES ADOPTED TO FACILITATE INCLUSIVE EDUCATION AND PROVISION OF ESS

Botswana has adopted several strategies to facilitate inclusive education and provision of ESS. Some of these strategies are discussed next.

- Capacity building/human resource development . the country is aiming to train more educators in the area of special or inclusive education. This is shown by its efforts in providing elements of special education to all teacher trainees during pre-service (cf. 3.2.2.1). In-service training also focuses on equipping educators with the necessary skills to provide support to learners experiencing barriers to learning and development as well as other systems within the inclusive system of education. In-service training is also directed to school heads, education officers and support staff (Matale, 2000:3);
- SITs . the aim of having these teams in schools was to try and reduce the work load at CRC as already discussed (cf. 3.4.2.6). It is intended to assist regular teachers to address the learning needs of individual learners at classroom and school level before making referrals to CRC. Dart (2007a:22) however has established that SITs have less impact on teaching and learning within junior secondary schools as compared to primary schools and the CRC. Scholars such as Kisanji (1999a:7-8) have on the other hand identified advantages of these teams in relation to Botswana context (see Mbengwa, 2006:105, cf. 3.9.1.3.1). Mbengwa (2006:127) learnt that multidisciplinary teams are highly utilized in Botswana. It was understood through the interview with one special education officer that SITs are in the form of multidisciplinary teams in schools;
- Itinerant Teacher Service (ITS) . it is intended to meet the needs of learners experiencing barriers to learning and development in regular schools. In particular the project enables both the teachers and learners with physical impairment access to support within the ordinary school setting (Matale, 2000:4) and
- Collaboration between departments and related stakeholders . the Ministry of Education collaborates with the Ministry of Health, Ministry of Local Government, NGOs, private sector and parents (Mbengwa, 2006:106). This collaboration is very important especially that Botswana still has a problem of

shortage of both material and human resources necessary for effective implementation of inclusive education and provision of support.

3.5 CONCLUSION

The current status of teacher preparation for inclusive education and provision of ESS in Botswana appears relatively advanced despite certain shortcomings. Through literature it was established that the country has taken significant steps in teacher training and inclusive education. For example pre- and in-service teacher training enable teachers to do courses in special education. Moreover, there is evidence that some learners experiencing barriers to learning and development are included in ordinary schools and are provided with support where possible to assist them to access the general curriculum. Furthermore, parents are provided with support that equips them with knowledge and skills to support their children at home and also to develop strategies to come to terms with their children's conditions. On the other hand, there seems to be numerous factors hindering effective implementation of inclusive education and provision of ESS in the country. It is important however, to acknowledge the country's efforts in trying to address those challenges.

Having looked at the literature review, it is only appropriate that empirical research is carried out for a deeper understanding on pre-service teacher preparation for inclusive education and appropriate support in Botswana. The chapter that follows will therefore outline the research methodology to be used in gathering information to that effect.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 INTRODUCTION

This chapter focuses on the research methodology that was employed in the empirical investigation. It followed after an in-depth survey of related literature on different aspects and critical issues on inclusive education teacher training and ESS within the inclusive system of education. The literature survey focused on both international and Botswana perspectives. The chapter paid attention to research approach, research design, sampling, data collection, analysis, and professionalism and ethical considerations of the researcher.

The study was conducted with an attempt to address the problem statement that suggested that the current special education programme at the two secondary colleges of education may not adequately prepare teachers to function effectively within the evolving inclusive education system. Subsequent to the problem statement, the research intended to answer the following research questions:

- To what extent has Botswana aligned teacher training with inclusive education and support as compared to the international perspective?
- to what extent does the special education programme prepare teachers to provide support and function effectively within the inclusive education system?
- what factors in the colleges influence the learning and acquisition of knowledge and skills relevant for effective inclusive education and support?
- what factors in the field affect teacher effectiveness in providing support within the inclusive education system and
- what recommendations (in terms of a possible training model) could be proposed with regard to the status of teacher training within inclusive education and support in secondary teacher training institutions?

The research objectives in this regard were as follows:

- To explore and examine international policies and guidelines with regard to special/inclusive education teacher training programmes;
- to explore and examine policies and guidelines with regard to the special or inclusive education training programmes in secondary colleges in Botswana;
- to evaluate the special education programmes on teacher effectiveness in the provision of inclusive education and support in the field and
- to propose a model for special or inclusive education teacher training at the two secondary colleges.

In an effort to answer the research questions and achieve the set objectives, a number of research approaches were studied and employed. The approaches are discussed next.

4.2 RESEARCH APPROACH

Quantitative and qualitative research approaches have been highly utilized in educational research by a significant number of scholars for years. The tendency has been to employ one of the approaches at a time. This could have been due to debates with regard these two approaches and the underlying paradigmatic differences. There were those scholars who posited that the quantitative approach was more scientific than the qualitative approach because of the positivistic foundations . but of course proponents of the more post-modern, qualitative approach thought otherwise. New developments in research have however proved that both the approaches have both weaknesses and strengths and none of the approaches seem to be superior in relation to the other. In support of this opinion, McEwan and McEwan (2003:21) argue that regardless of the research problem under investigation, none of the approaches is superior when compared to the other.

Walliman (2005:271) then contends that a researcher is not in any way compelled to choose between the two approaches, and where applicable, an integrated approach can be applied. This indirectly indicates that the two approaches complement one

another . although some researchers find the opposing+ paradigmatic foundations irreconcilable.

For the purpose of this study, however, the researcher specifically decided on an integrated or mixed approach in which both quantitative and qualitative approaches are used.

In the view of the researcher the mixed approach leaves ample room for a variety of interpretations of reality, which complement each other and are not in direct opposition. In addition to its complementary strengths and weaknesses, its data have different characteristics and also require different techniques of analysis (to be discussed in detail later). Durrheim (2006:47) succinctly states that %on the surface level, quantitative and qualitative researchers base their conclusions on different kinds of information and employ different techniques of data analysis+. The mixed approach builds on this complementarity.

At this stage, the quantitative and qualitative components of the mixed approach are discussed separately so as to enable the reader to understand what each entails in terms of focus, merits, and demerits. Subsequently, the discussion will be on the integrated or mixed approach.

4.2.1 QUANTITATIVE RESEARCH

Quantitative research originated in the physical sciences and is rooted in the positivistic approach (Kgothule, 2006:112; Mbengwa, 2006:111; Muijs, 2004:5; Weinreich, 2006:1). There are two main types of quantitative research approaches, namely experimental (scientific) and non-experimental approaches. The science-based methods used in quantitative research are designed to ensure objectivity or validity, generalisability and reliability of observed behaviours (Leedy & Ormrod, 2001:102; Weinreich, 2006:1). The quantitative research is furthermore grounded in numerical presentation of information where data is collected and analyzed through statistical means. According to Aliaga and Gunderson (in Muijs, 2004:1) it is a research approach used for %explaining phenomena by collecting numerical data that are analysed using mathematically based methods (in particular, statistics)+. In quantitative research it is assumed that it is through scientific measurement and explanation that objective truth about the world can be reached. When using this

research approach researchers are ideally objective observers who neither participate in nor influence what is being studied. The other distinguishing features of the quantitative approach are that the approach involves a large sample that can be reached through a questionnaire or an interview schedule, which allows gathered information to be presented descriptively and analytically and thus allowing for theory and hypothesis testing.

Many other assumptions about the quantitative approach have been established (see Abawi, 2008:4; McMillan & Schumacher, 2001:15-16). For example it includes assumptions about (a) the world . reality can be studied objectively, as long as the study is independent of the researcher's feelings and beliefs; (b) research purpose . the research seeks to develop generalizations that contribute to theory that allows the researcher to forecast, explain and understand a phenomenon; (c) research methods and process . the researcher is guided by established logical procedures and he or she may decide on the methods as part of a pre-established design before collection of information; (d) prototypical studies . through experiments or correlations, the quantitative research seeks to produce valid and reliable results; (e) research role . the researcher remains distant to avoid subjectivity, and (f) the importance of the context in the study . the research aims to make conclusions which are not context-bound.

Scholars who use or study the quantitative research approach have identified both strengths and limitations associated with this research method. It will only be appropriate for researchers vying to use the said approach to know and understand its strengths and weaknesses. These will now be highlighted.

4.2.1.1 Strengths

- Methods employed in the quantitative paradigm produce quantifiable, reliable data that are usually generalizable to some larger population (Weinreich, 2006:2);
- using strictly defined measurement approaches to assign numbers to observation allow other researchers to replicate findings and to confirm or refine them in future;
- through the quantitative approach data gathered is subjected to highly sophisticated, statistical analysis and modelling procedures that can uncover

interesting and important relationships that are not visible to the naked eye (Guide Star Research in Mbengwa, 2006:111);

- the quantitative approach states the research problem in very specific and set terms;
- it clearly and precisely specifies both the independent and dependent variables under investigation;
- the approach firmly follows the original set of research goals, arriving at more objective conclusions, testing hypotheses, determining the issues of causality;
- it achieves high levels of reliability of gathered data due to controlled observations, laboratory experiments, mass surveys, or other forms of research manipulations;
- the approach eliminates or minimizes subjectivity of judgement and
- the approach allows for longitudinal measures of subsequent performance of research subjects (Silverman, 2000:3)

4.2.1.2 Limitations

- The approach decontextualizes human behaviour in a way that removes the event from its real world setting and ignores the effects of variables that have not been included in the model (Weinreich, 2006:2);
- it uses a static and rigid approach and so employs an inflexible process;
- quantitative methods are simplifications of qualitative methods and can only be meaningfully employed when qualitative indicators have shown that a simplification of identified relations is possible (Sarantakos, 2002:55;
- it fails to provide the researcher with information on the context of the situation where the studied phenomenon occurs;
- the approach has an inability to control the environment where the subjects provide the questions in the study;
- it has limited outcomes to only those outlined in the original research proposal due to the closed type of questions and the structured format and
- it fails to encourage the evolving and continuous investigation of a research phenomenon (Silverman, 2000: 5-7).

4.2.2 QUALITATIVE RESEARCH

Qualitative research is probably more often used in the social sciences when compared with a quantitative research design. The qualitative research approach is at times referred to by a variety of terms, which in most cases reflect different research approaches. For example, field research; naturalistic inquiry; ethnography, interpretive research, participant observation, inductive research or case study research. Unlike the quantitative approach, the qualitative approach involves the studying of human behaviour within its own setting. It is described as %multi-method in focus, involving an integrative, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomenon in terms of meanings people bring to them+ (Denzin & Lincoln in Sidani & Sechrest, undated). Data for the qualitative approach may be collected by techniques including interviews, observations, recordings and case studies and such data is concerned with describing meaning, rather than with drawing statistical inferences. The loss of reliability by qualitative methods is encountered in terms of validity by providing a more in-depth and rich description of the behaviour or situation. Qualitative researchers claim that there is no objective reality. Rather, there are multiple realities constructed by human beings who experience a phenomenon.

Researchers using the qualitative research approach believe that they can reach the desired or anticipated results by participating or being immersed in a research situation. In fact, the researcher becomes the instrument of data collection, and results may vary greatly depending upon who conducts the research (Weinreich, 2006:2). Many other assumptions forming the bases of the qualitative research are thus: (a) assumptions about the world . the constructed realities exist in the minds of the individuals and cannot be broken into parts but must be examined as a whole where the investigation has to be carried under natural conditions (Sidani & Sechrest, undated); (b) assumption about the research purpose . the researcher interacts to some degree with participant(s) with the aim to gain insight into the participant's point of view (Kgothule, 2004:116; (c) assumption about research methods and process-flexibility in design, data collection, and analysis of research is strongly recommended to enable an in-depth understanding and valid representation

of the participants perspective (Silverman, 2000:8); (d) assumption about prototypical studies . data analysis and interpretation is guided by the researcher's capability to identify inter-subjective themes, and the patterns of observed behaviours or events in order to realise exceptional results (Sidani & Sechrest, undated); (e) assumption about the researcher . the researcher is immersed in the situation and the aspect under investigation, and (f) assumption about the context in the study . it is assumed that human behaviours are strongly influenced by natural environments, and as such the qualitative research is context-bound (Abawi, 2008:6).

Just like quantitative research, the qualitative approach has both strengths and limitations. The knowledge of the strengths and limitations of the qualitative research will assist any researcher to produce quality research, and it is therefore important in this study that these are highlighted.

4.2.2.1 Strengths

The strengths of qualitative research include the following:

- Qualitative approaches enable researchers to elicit rich, detailed data that allows participants' ideas to remain intact . thereby providing the context for healthy behaviour (Weinreich, 2006:2);
- through the qualitative research approach results obtained have sufficient details that enable the reader to understand the idiosyncracies of the situation (Neill, 2006:3);
- qualitative research attempts to depict the fullness of experience and in a meaningful and comprehensive way (Winget, 2005:3) and
- data collection, analysis and interpretation are performed in flexible ways. It has also been observed that the qualitative research approach does not detach research subjects from their natural settings as well as their operational terms (Silverman, 2000:8).

4.2.2.2 Limitations

- When using the qualitative research approach it is very unlikely to avoid subjectivity and this compromises the reliability and validity of approaches and results (Mbengwa, 2006:113);
- it is not easy to detect or prevent bias from the researcher;

- data collection and analysis may be labour intensive and time consuming;
- the researcher may deviate from the original objectives of the research in response to the changing nature of the context and
- it requires highly experienced researchers to obtain the targeted information from respondents (Weinreich, 2006:2).

Subsequent to this discussion, the mixed-method approach will now be highlighted.

4.2.3 AN INTEGRATED OR MIXED-METHOD APPROACH

A mixed-method approach, as asserted by Muijs (2004:9) is flexible and is determined by what researchers want to discover rather than by any predetermined epistemological position. In this approach, the quantitative or qualitative method can be predominant or the methods could have equal status. Johnson and Onwuegbuze (2004:14-15) caution researchers that the aim of a mixed approach is to tap from the strengths of both quantitative and qualitative approaches as well as to reduce the limitations each single approach has rather than to replace either of the approaches.

Following the study of quantitative and qualitative approaches, (cf. 4.2.1 & 4.2.2), one may conclude that one approach will add value to the other, therefore combining the two may lead to much improved results. Scholars such as Bowen (1996:3); Niglas (2004:11) and Weinreich (2006:3) are of the view that a blend of quantitative and qualitative methods yields better results in that one method complements the other. In particular, Sidani and Sechrest (undated) state that the assumption underlying this pluralism is that each type of research methodology, whether quantitative or qualitative, has an inherent bias or weakness; however, the biases or weaknesses of research methods are not identical. Consequently, when several methods are utilized conjointly, the bias inherent in one method may be cancelled out by the bias introduced by another. That is, the weaknesses or limitations of one method may be compensated for by the strengths of the other. In his preference for using more than one approach, Gray (2004:33) writes that a research method may be appropriate for one question and not the other; mixed approaches enables triangulation; researchers may be able to balance any potential weaknesses in each data collection approach when using a mixed approach. In Johnson and

Onwuegbuzes (2004:15) opinion, using quantitative and qualitative approaches concurrently minimises the schism between the two research paradigms. Refer to Table 11 to see how the mixed approach blends the quantitative and qualitative approaches.

The already presented characteristics of a mixed-method approach motivated the researcher to employ the same during the study. Johnson and Onwuegbuzes (2004:18) are of the opinion that gaining insight into the merits and demerits of the traditional quantitative and qualitative paradigms, puts the researcher in a position to employ a mixed approach.

Table 11: The Emphasis of Quantitative, Mixed, and Qualitative Research Approaches
(extracted from Johnson & Christensen, 2007:2).

	Quantitative research	Mixed research	Qualitative research
Scientific method	Deductive or top-down. The researcher tests hypothesis and theory with data	Deductive and inductive	Inductive or bottom-up. The researcher generates new hypothesis and grounded theory from data collected during field work
View of human behaviour	Behaviour is regular and predictable	Behaviour is some-what predictable	Behaviour is fluid, dynamic, situational, social, contextual, and personal
Most common research objectives	Description, explanation, and prediction	Multiple objectives	Description, explanation, and discovery
Focus	Narrow-angle lens, testing specific hypothesis	Multi-lens focus	Wide-angle and deep-angle lens, examining the breadth and depth of phenomenon to learn more about them
Nature of observation	Attempt to study behaviour under controlled conditions	Study behaviour in more than one context or condition	Study behaviour in natural environments. Study the context in which the behaviour occurs
Nature of reality	Objective (different observers agree on what is observed)	Commonsense realism and pragmatic view of world (i.e., what works is what is real-or true)	Subjective, personal, and socially constructed
Form of data collected	Collect quantitative data based on precise measurement using structured and validated data collection instruments (e.g. closed-ended items, rating scales, behavioural responses)	Multiple forms	Collect qualitative data (e.g., in-depth interviews, participant observation, field notes, and open-ended questions). The researcher is the primary data collection instrument
Nature of data	Variables	Mixture of variables, words and images	Words, images, categories
Data analysis	Identify statistical relationships	Quantitative and qualitative	Search for patterns, themes, and holistic features
Results	Generalizable findings	Corroborated findings may generalize	Particularistic findings. Representation of insider (i.e., emic) view point. Present multiple perspectives
Form of final report	Statistical report (e.g., with correlations, comparisons of means, and reporting of statistical significance of findings)	Eclectic and pragmatic	Narrative report with contextual description and direct quotations from research participants.

It has to be acknowledged however that the mixed approach also has both strengths and weaknesses which researchers need to be aware of. At this stage the identified strengths and limitations will be presented.

4.2.3.1 Strengths

Bowen (1996:3) identified the benefits of using a mixed approach as follows:

- While the quantitative approach strives to control for bias so that facts can be understood in an objective way, the qualitative approach is striving to understand the perspective of the programme stakeholders, looking at firsthand experience to provide meaningful data;
- the accumulation of facts and causes of behaviour are addressed by quantitative methodology whilst the qualitative methodology addresses concerns with the changing and dynamic nature of reality;
- quantitative research approaches strive to identify and isolate specific variables within context (seeking correlation, relationships, causality) of the study whereas the qualitative design focuses on a holistic view of what is being studied (via documents, case histories, observations and interviews);
- quantitative data is collected under controlled conditions in order to rule out the possibility that variables other than those under study can account for the relationships identified, while the qualitative data are collected within context of their natural occurrence and
- both quantitative and qualitative research approaches seek reliable and valid results. Data that are constant or stable as indicated by the researcher's ability to replicate the findings is of major concern in the quantitative arena while validity of the qualitative findings is paramount so that data are representative of a true and full picture of constructs under investigation.

4.2.3.2 Limitations

Johnson and Onwuegbuzi (2004:21) identified some of the limitations as follows:

- It could be taxing for a single researcher especially if more approaches are expected to be employed simultaneously . it may require team work;
- little knowledge and understanding of multiple methods and approaches and how to use them concurrently may somehow jeopardise validity of the research;
- methodological purists contend that one should always stick to one paradigm (either quantitative or qualitative);
- it is often more expensive;
- it is more time consuming and

- some of the mixed research remain to be worked out fully by research methodologists (e.g., problems of paradigm mixing, how to qualitatively analyze quantitative data, how to interpret conflicting results).

A background understanding of the three research approaches, especially the mixed or an integrated approach that was used in the study helped the researcher greatly during the entire research. It was through this background information that the research design was established. In particular, the researcher used the information gained when developing the research instruments (questionnaires and interview schedules).

The next section presents the research designs utilised in the quantitative and qualitative components of the mixed-method approach.

4.3 RESEARCH DESIGN

Research design involves establishing and planning ways in which the research will be conducted, so that sound conclusions in relation to the research question as well as the problem statement are reached. For example, the researcher may have to decide on a time frame for the research, the target population, sampling procedures, the research methods, data collection methods and analysis strategies and techniques. A research design is defined by Durrheim (2006:34) as a strategic framework for action that serves as a bridge between research questions and the execution or implementation of the research. According to Walliman (2005:248) the significance of drawing a research plan (design) is to take the initial research problem and decide how it will be researched. Some of the aspects to be considered in the design are available time, financial resources, facilities, availability of data, possible methods of analysis, and the researcher's own development in terms of research skills (Walliman, 2005:248). More in terms of research design is that it aims to ensure that the purpose of the study is achieved and also that the research can be completed with the available resources (Durrheim, 2006:35). It is for this reason that Durrheim (2006:37) advises researchers that it is imperative that they follow some principles when deciding on the design in order for them to successfully complete the research. The identified principles are such that the researcher should consider (a) the purpose of the research, (b) the theoretical paradigm informing the research, (c)

the context or situation within which the research is carried out, and (d) the research techniques employed to collect and analyse data.

Quantitative and qualitative researchers differ in some way in designing their research. For instance, the earlier tend to restrict their designs to the already existing models or scientific principles, while the latter prefer flexibility, so that if necessary they can rework their designs. In support of this idea, Durrheim (2006:35) succinctly states that qualitative researchers specifically suggest designs that are more open, fluid, and changeable, and are not defined purely in technical terms.

The research designs in the quantitative and qualitative approaches were studied in detail, in order to decide on the ones to use in the current study. The quantitative research designs that were looked at include: experimental, surveys and content analysis whereas the qualitative research designs in the likes of case study, ethnography and grounded theory were examined. Following an in-depth study of the various quantitative and qualitative research designs, the researcher could not establish the best design fit from the mentioned options. Against this background, designs in programme evaluation were found to be the most appropriate, especially that the study focussed on evaluating the current special education programme offered at secondary colleges of education.

According to De Vos (2005:368), when evaluating a programme, one aims to establish how far the programme goals and objectives are achieved, or how effective the programme is. Likewise, for the current research, the researcher aimed to investigate the effectiveness of the current teacher training programme in preparing teachers for effective implementation of inclusive education and provision of support. In the process of evaluation, one may investigate activities, characteristics and outcomes of the programme in order to improve its effectiveness and to inform decisions about future planning (De Vos, 2005:369). Likewise, in the current study, the special education programme was evaluated by investigating its strengths and weaknesses (characteristics), as well as its general status (activities) with regard to appropriate and effective training of teachers for inclusive education and support. Furthermore, the research suggested a training model for a more effective teacher preparation for inclusive education and support, it is envisaged that the suggested

model will inform curriculum designers and related stakeholders about future teacher preparation programme.

In the study, both quantitative and qualitative (integrated) research approaches were utilised, hence it was necessary to employ an integrated research design or model for evaluating the programme on teacher effectiveness. From De Vos (2005:370) it is shown that the integrated model has phases, including (1) Needs assessment, (2) Evaluability assessment, (3) Programme monitoring (4) Impact evaluation, (5) Efficiency assessment, (6) Utilisation implementation, and (7) Empowerment evaluation. A summary of this is presented as follows . the researcher being the evaluator in this case.

Phase 1: Needs assessment . ***The evaluator has to identify and present the problem and propose alternatives to what is being evaluated.*** With regards the current study, the researcher identified the problem by firstly observing the MCE and TCE graduates performance in the field. This was later followed by detailing the problem with regards the provision of support within inclusive settings.

Phase 2: Evaluability assessment . ***the evaluator has to seek consent or permission to evaluate the programme. This means that the researcher has to clearly explain to relevant authorities and stakeholders why the programme needs evaluation.*** For the purposes of this study, permission was sought from the Permanent Secretary . Ministry of Education. Request for permission was accompanied by research proposal which explained the whole purpose of research.

Phase 3: Programme monitoring . ***the evaluator has to identify and ascertain the strengths of the existing programme.*** During the current research, when identifying the problem, the researcher remembered to establish existing strong points of the programme. This was done with the help of the literature review on inclusive education and support.

Phase 4: Impact evaluation . ***the evaluator has to establish effects of the programme on the intended outcomes.*** It was through questionnaires and semi-structured interviews that the effects of the programme were established.

Phase 5: Efficiency assessment . ***the evaluator has to establish how scarce resources must be allocated so that they are optimally utilised.*** By evaluating the status of the programme through the empirical study, the researcher was able to

learn about the resources available for the programme and those that need to be attained in order to effectively prepare teachers for inclusive education and support.

Phase 6: Utilisation implementation . ***the evaluator has to gather information about what the programme is doing in terms of its development, how and why the programme deviates from intended goals and expectations.*** The research questions and objectives helped the researcher to give a report on the entire programme.

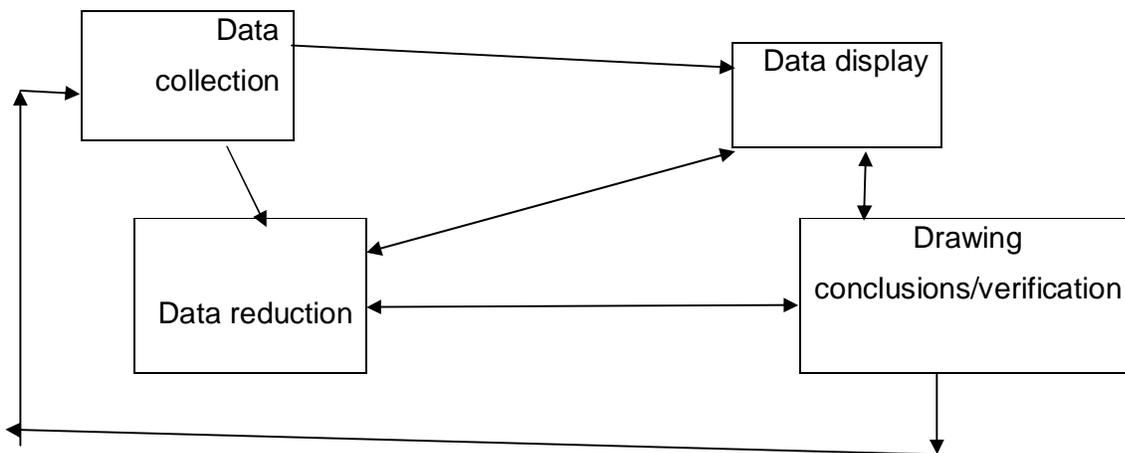
Phase 7: Empowerment evaluation . ***the evaluator has to stick to research ethics.*** The researcher made sure there was no doubt with regards the intentions of the researcher in doing the research. More about the researcher's conduct is presented later in the chapter (cf. 4.7).

Though it was necessary to use an integrated design, the researcher found it more compelling to present the qualitative design explicitly since much of the research is qualitative. The qualitative information for evaluating the programme was collected by the use of questionnaires and semi-structured interview schedules. Questionnaires targeted teachers (graduates of MCE & TCE) and school heads while semi-structured interviews were conducted with trainers and knowledgeable persons in the area of inclusive education and support. In fact, it has been asserted that if it is necessary to obtain precise and accurate data on the extent and distribution of a problem, the evaluator may need to undertake original research using sample surveys or censuses (De Vos, 2005:375). The formulation of questions for both categories was based on the literature review information. According to De Vos (2005:373) tapping existing sources may to some extent assist the researcher in performing needs assessment in relation to the programme evaluation.

Data from questionnaires was initially transferred from questionnaires to a newly created document. In the process of transferring data, the researcher established commonalities and patterns among answers and was able to formulate an appropriate heading for specific answers. The specific headings were coded and were then used to provide answers to research questions from the questionnaires (analysis). Data for interviews was tape recorded, transcribed, studied, assimilated into patterns, themes and analysed. Gray (2004:320) succinctly states that qualitative data requires a processing stage that often involves the editing of notes

and transcribing of tape recordings. In all the instruments, the process following data gathering may be summarised in about four steps which have also been identified by Gray (2004:320). The steps include: (1) coding (2) data reduction (3) establishing where more evidence of patterns and themes is sought (4) drawing conclusions by finding consistencies in themes and patterns in order to have substantiated generalisations. This implies that the researcher utilised an interactive model of qualitative data analysis, which can be seen in Figure 1.

Figure 1: An interactive model of qualitative data analysis (Miles & Huberman in Gray, 2004:321)



In addition to research designs, sampling procedures also form an important aspect of the research. The sampling procedures that were employed in the current study are therefore discussed next.

4.4 SAMPLING

Sampling is the process of selecting cases to observe. In fact, through sampling, any researcher is able to establish how representative the information is that is collected from the whole population. This makes sampling one of the vital procedures of any research.

In the current study, the entire population of the MCE and TCE graduates (2004 to date) could not be used for the research due to constraints that included time and finance. Moreover, at the time of research the researcher did not have the exact

number of graduates and also the number of those who were already in the field since not all graduates have been offered teaching jobs. It was therefore necessary for the researcher to sample in a way that a good section of the population was used for the study. The researcher is aware that using the whole population yields the most accurate results however, using a representative sample of the population may also give a true picture of the findings.

Sampling procedures may be done in a random and non-random style. Characteristics of random sampling include its ability to give researchers a reliable representation of the whole population and it gives subjects equal chances of participating. On the other hand, non-random sampling has a weakness of not giving the researcher the opportunity to make generalisations about the whole population. It was on this ground that for the purposes of this research, the random rather than non-random technique was utilised for obtaining teachers and school head respondents. In particular stratified, simple random, purposive and snowball sampling procedures were applied for the purposes of this study to determine schools, school heads, teachers, trainers and knowledgeable persons.

4.4.1 STRATIFIED SAMPLING

Stratified sampling aims to take samples from various strata (categories). This sampling method treats the population as separate sub-populations (Gray, 2004:87) and through this kind of sampling, a greater degree of representatives from population strata can be established (Blanche, Durrheim & Kelly, 2006:136). The reason for employing this kind of sampling is that the researcher believes that the identified strata are likely to present different responses (Gray, 2004:87). Two strategies, namely simple or non-proportional and proportional stratified sampling, are used in determining the sample population. In the former strategy, the researcher may oversample in some of the strata in order to draw inferences, while in the later the same proportion of representatives from each stratum is used. In both strategies, the samples are combined at the end to form the complete sample from the whole population.

4.4.2 SIMPLE RANDOM SAMPLING

Random sampling is used when the population is uniform or has similar characteristics (Walliman, 2005:276). In this kind of sampling, each element has exactly the same chance of participating, such that at the end a fraction of the entire population is being randomly selected (Blanche et al., 2006:134; Walliman & Baiche, 2001:232).

4.4.3 PURPOSIVE SAMPLING

In purposive sampling, the researcher selects what is thought to be typical of the sample. Blanche et al. (2006:139) are of the view that this sampling procedure depends on availability and willingness of people to participate and also on the fact that cases that are truly similar to the population are selected.

4.4.4 SNOWBALL SAMPLING

Snowballing is when a researcher is directed to other likely participants by the already participating candidates. Blanche et al. (2006:139) describes it as a process of accumulating a sufficiently large sample through contacts and references. According to Gray (2004:88), snowball sampling involves indentifying a small number of subjects by the researcher, who in turn identify others in the population.

The application of the already discussed sampling procedures are described next.

The study was spread to junior secondary school teachers in the five regional administrative (supervisory) areas of the secondary department (see Figure 2). The reason for spreading the study to all the regions was to reach as many teachers as possible and also to ensure proportional representation in the five educational regions of the country. A list of all the junior secondary schools was requested and obtained from the teaching practice coordinator at TCE. Like it was mentioned earlier, stratified random sampling was used to determine the names and numbers of the schools that participated in the study. The five administrative regions represented strata (schools were divided into regions) from which the participating schools were sampled. The sampling was such that every second count from the list, identified the school for the research, and this was done per region until all the lists were

exhausted. It is important to note that regions have different number of schools, and this resulted in different number of participating schools per region (non proportional stratified sampling). The selection error was controlled by carefully going through the lists more than once, to check if the counting was correct, thus avoiding wrong identification of the participating schools. The researcher did not request for the names of teachers with the understanding that school heads had information about their teachers hence they would easily identify appropriate participants from the two colleges. It has to be acknowledged however that if names were initially requested for, the validity and reliability of the research would have been improved.

Four hundred and eight (408) teachers from each of the hundred and two (102) stratified sampled participating schools were, with the help of the school heads, randomly chosen to complete the questionnaire. Walliman and Baiche (2001:232); Cohen, Manion and Morrison (2000:100) allude that with random sampling researchers are able to have a reliable representation of the whole population, are also able to subject all group members to an equal chance of participating and the probability of a subject being picked, is entirely independent of the next. However, this kind of sampling poses a challenge in that it is not always possible to have a readily available complete list of the population that is needed. In addition, the school heads of the 102 participating schools formed the additional sample for the study, apart from the teachers. Though there were 408 copies of questionnaires posted for teachers and 102 for school heads, only 20 and 3 copies of questionnaires for teachers and school heads respectively were returned by the final date (end of October, 2009) indicated in the consent letter (Addendum H). Follow-up was then done by phone to the schools that had not responded. Explanations to zero responses were that some schools did not receive copies of a questionnaire, some participants had misplaced the questionnaires, and that some were posted.

The researcher then made follow-ups. During follow-up some schools promised to post the completed questionnaires, however the researcher never received all those that were said to have been posted. By the end of November 2009, 55 schools had responded with a total of 175 and 52 completed copies of questionnaire from teachers and school heads respectively. The researcher could not make any follow-up in December because it was school and Christmas holidays. The researcher felt the holiday somehow interfered with the returning of questionnaires. In January

2010, the researcher phoned 23 reachable schools that formed the sample and arranged for hand delivery and collection of questionnaires. Questionnaires were delivered and collected after five working days. Eventually the response rate stood at least 50% (226 teachers and 72 school heads), refer to Table 12. Despite the mentioned challenges, it has to be acknowledged that the number of teachers and school heads who responded provided the much needed information for the study hence it was confidently used to draw conclusions for the research.

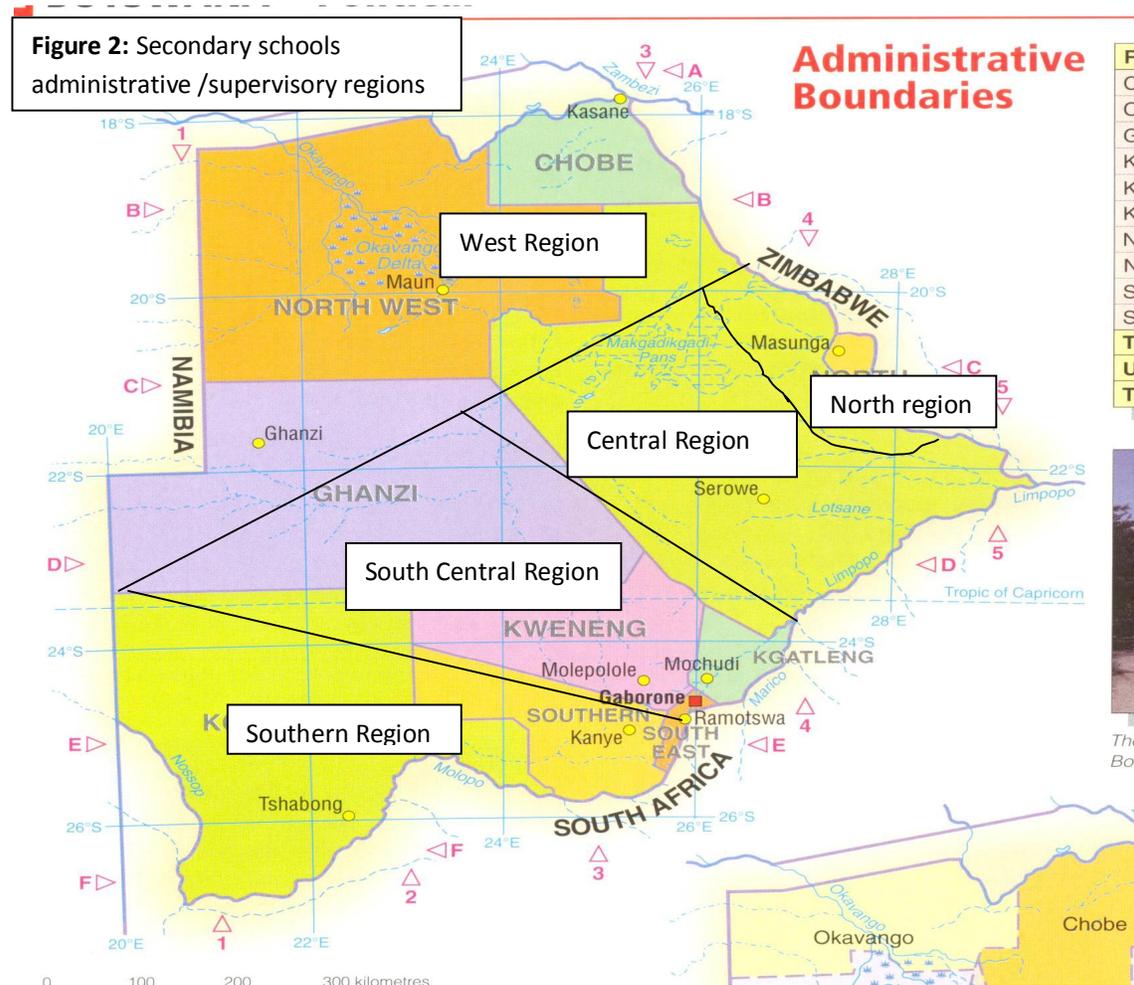


Table 12: Copies of questionnaires distributed and returned

Region	Expected Number		Actual (only useful)	
	Teachers	School heads	Teachers	School heads
South Central	108	27	57	19
Central	124	31	69	21
Southern	72	18	29	11
North	64	16	50	14
West	40	10	21	07
Total	408	102	226	72

In this research purposive sampling was also employed to identify knowledgeable persons in the area of inclusive education, support and teacher training. These groups participated in the research by means of semi-structured interviews. The researcher first had to identify the appropriate subjects whom because of their experience, status or nature of their job provided the needed information. The following details guided the researcher to identify the knowledgeable participants:

Interviewee 1: Holds a high position at the Division of Special Education and has written papers and presented on the area of inclusive education (for example on the inclusion of learners with visual impairment in Botswana).

Interviewee 2: A lecturer at a local university. She/he has been more focussed on special education and has been engaged in the area of inclusive education and support, for example, as a researcher. She/he has through research addressed issues concerning instructional accommodations within regular or ordinary curriculum for learners experiencing barriers to learning and development. Furthermore, the interviewee has also shown interest and researched on teacher preparation models for inclusive education.

Interviewee 3: A second lecturer at a local university. This is a colleague to the second interviewee and they have worked together on the areas mentioned above. The researcher was referred to this interviewee by the colleague and the co-author.

Interviewee 4: An Executive Dean at a South African university. The interviewee has read widely and documented a lot of information on inclusive education and support. For example, she/he has produced and contributed to research concerning the importance of collaborative partnerships within the inclusive system of education. She/he has also researched and contributed in writing articles on the challenges experienced by teachers in the implementation of effective inclusive education.

Interviewee 5: He/she has for some time worked at the Lesotho College of Education. His/her duties included among others the training of people in the area of special education. Currently he/she is engaged in establishing examples of approaches to the classification of SEN by governments of various countries.

Interviewee 6: He/she initially trained as an ordinary and later as a specialist teacher. She had the opportunity to study a component on inclusive education during her later studies. Furthermore, she has experience of teaching in both ordinary and special schools.

It is worth noting that though purposive sampling aims to satisfy the needs of the researcher, % does not pretend to represent the wider population; it is deliberately and unashamedly selective and biased+(Cohen et al., 2000:104). Furthermore, Gray (2004:87-88) cautions that it has both merits and demerits. For example, through this kind of sampling, it is possible for the researcher to achieve a true cross-section of the population while the researcher using the same approach may unintentionally omit important characteristics or be biased.

Initially, the researcher had made arrangements with one knowledgeable person at the local university. The same participant identified and referred the researcher to one of his colleagues, who in-turn formed the sample (snowballing).

Teacher trainers were also purposively selected. The researcher had no doubt that they were the right candidates to evaluate the special education programme offered at the two institutions since they are directly involved with it.

The sampling procedures, sample composition, size and representation of the study, indirectly or directly influenced the researcher's choice on the methods of data collection as will be presented in the next section.

4.5 METHODS OF DATA COLLECTION

The procedures that were used in collecting data are described in this section. It is important to acknowledge that there are various data collection instruments that can be utilized for data collection. However, for the purposes of this research, questionnaires and semi-structured interview schedules were employed. They were designed based on information from the literature on international perspectives, the problem statement, the general aims and objectives of the research as well as the research questions.

4.5.1 QUESTIONNAIRES

Copies of questionnaires were selected to solicit data from teachers and school heads since questionnaires enable respondents time to read and understand questions before providing answers. The fact that the research covered a large area, and also that a large sample was far away, the questionnaire was found to be the most suitable instrument. The other reason for using a questionnaire in this research was that of its capability to collect both quantitative and qualitative information from people . therefore appropriate for the mixed approach methodology employed in the research. The researcher was also influenced by scholars such as Walliman and Baiche (2001:236) who are of the view that the questionnaire is a very flexible tool for data collection; it also enables the researcher to organise the questions and receive responses without actually having to be in contact with every participant. The same authors on the other hand advise researchers to be very careful when using the tool so as to satisfy the objectives of a particular piece of research (2001:236).

Questionnaires used in the research consisted both open and close ended questions. The questions were specifically designed for the purposes of qualitative and quantitative approaches respectively. Both type of questions have distinguishing features which could be beneficial or not to the current study. For instance, open ended questions give the respondents the chance to explore on ideas and hence

give responses freely. The same type of questions, however, pose challenges to the researcher in that it is not always easy to group and compare answers from various respondents, nor is it easy to record and score the responses (Bless & Higson-Smith, 1995:122; Cohen et al., 2000:248). Close ended questions are quick to complete and straightforward to code and do not discriminate unduly on the basis of how articulate the respondents are (Cohen et al., 2000:248). On the other hand, close ended questions do not give the respondents freedom to explore . their choices are limited to one or more choices from a fixed list of answers provided (Kanjee, 2006:487), the list might not be exhaustive and there might be a high possibility of bias (Oppenheim in Cohen et al., 2000:248).

The questionnaires for both the school heads and teachers were developed using the literature review as well as the research objectives. Objectives were further simplified into research questions so that the focus of the research was highly maintained. Furthermore, the researcher utilised some ideas from research papers; see for example Hay et al. (2001) and Nel (2007) that were somehow in line with the current research. In effect, there were prominent ideas and questions from the aforementioned papers that were suitable for the research and also covered some aspects of the literature review. The researcher however believes that it would have been helpful if standardised questionnaires on the evaluation of the special education course on teacher effectiveness could have been found and utilised. The questionnaires were designed such that the first section captured biographical details and the other section focussed on the evaluation of the course in terms of teacher effectiveness to render support within an inclusive environment (see Addenda G and H for the questionnaires).

4.5.1.1 Strengths of questionnaires

Knupfer and McLellan (2001:5) observe that:

- Questionnaires enable researchers to reach large numbers of people from wide geographical areas;
- questionnaires allow respondents time to reflect on their answers or check information prior to responding, thereby leading to more accurate information and
- they are cost-effective in terms of money and time.

Walliman and Baiche (2001:236) also conclude that:

- Questionnaires allow the same questions for each respondent, and the researcher has no influence there-upon;
- questions are fixed . they do not change according to how the replies develop and
- questionnaires allow for anonymous responses, allowing for somewhat embarrassing questions to be asked with a fair chance of getting a true response.

4.5.1.2 Limitations of questionnaires

Knupfer and McLellan (2001:5) established that:

- Questionnaires have a lower response rate especially if they are mailed;
- questionnaires need special care with designing questions that will be self-administered;

In addition, the researcher discovered during a masters degree study that:

- respondents may misinterpret questions and therefore may not give useful responses;
- some respondents may not have much interest in completing the questionnaire and may not attend to all questions;
- some respondents may see the completion of a questionnaire as time consuming especially if the tool is long and
- the return rate may be low either due to misplaced questionnaires or delayed posted questionnaires.

4.5.1.3 Piloting of questionnaires

Fouché and Delport (in De Vos 2005:82) are of the opinion that conducting a pilot study is a crucial step before attempting a major study. Piloting gives the researcher the opportunity to identify and address the possible limitations inherent in the instrument beforehand. According to Gray (2004:205), questionnaires, unlike interview schedules, cannot be edited during the actual data gathering stage. It is therefore imperative that they are previously piloted so that they are accurate, unambiguous and simple to complete.

For the current study, the questionnaires were reviewed by the researcher & colleagues at work (special education lecturers). Furthermore, the questionnaires were pilot tested among a group of third (final) year trainees at TCE for the purposes of checking their appropriateness, clarity as well as effectiveness. A focus group of fifteen trainees at TCE was used for this purpose. The researcher chose to use third year student teachers since this group has already completed two of their teaching practices, therefore, they have experience in working with learners experiencing barriers to learning as well as support services provided in schools. The other reason for using this group was because of its exposure to the special education programme for at least two years and nine months hence the trainees are able to evaluate the course in relation to their effectiveness when they were in the schools. The group was also chosen for convenience purposes. Peterson (2000:116) is of the view that pilot testing can be done on a convenience sample that can include different groups of people and individuals who are reasonably similar to targeted study participants.

The researcher also pilot tested the questionnaire instrument for school heads among school heads in Tonota village. The group was used for convenience reasons as well. Comments from colleagues, trainees and school heads were incorporated in order to produce the final instruments. As it has already been mentioned, pilot testing of instruments has been found to be the single most effective strategy to minimise problems. Muijs (2004:51) recommends that colleagues should be involved in the reading of the instrument, after which the instrument should be used with a small group of people from the population intended for sampling who should be requested to provide feedback.

4.5.1.4 Questionnaire administration

Despite the disadvantages of mailing questionnaires, the researcher initially settled for mailing all questionnaires to schools. Preparatory arrangements to mailing questionnaires were such: there was an attachment of a permission letter from the Permanent Secretary as well as request and introductory letter to the school head (Addenda C & F).

The Permanent Secretary had advised the researcher to seek consent from the Director Teacher Training and Development (TT&D), College Principals, Chief Education Officers for the five supervisory or administrative secondary regions, as

well as the school heads for all the participating teachers and schools and this was done accordingly (see Addenda D, E, F,). Like it was mentioned in the previous section (cf. 4.5), the researcher indicated in the letter when the questionnaire should have been completed and returned to the researcher; however, many schools did not adhere to that request. This made the researcher to personally deliver and collect questionnaires to and from schools within reach.

In addition, there was a stamped envelope given to each school that was used for mailing completed questionnaires to the researcher. The researcher made follow-ups by phone to those schools that did not return questionnaires as per the schedule.

In order for the researcher to have further confidence in the findings, and also to expand her understanding of the study area, another strategy, namely the interview was also used to collect data from knowledgeable persons and teacher trainers. The researcher is of the same view as Turner (in Johnson & Onwuegbuze, 2004:18) that collecting multiple data using different strategies is likely to result in complementary strengths and non-overlapping weaknesses. It is for this reason that in this research interviews were also utilized to gather data.

4.5.2 INTERVIEWS

There are different types of interviews, and Cohen et al. (2000:270) argue that the types depend on the sources one consults. Some of the types include: structured; semi-structured and open-ended. For the purposes of this research, semi-structured interview schedules were used for teacher trainers and for knowledgeable persons. Semi-structured interviews were found suitable based on the understanding that they are capable of obtaining answers for the set questions, while allowing time for further development of the given responses, and including more open questions (Walliman & Baiche, 2001:240). Moreover, Winget (2005:5) is of the opinion that while its nature of %semi-nessqallows a level of freedom in questions and responses, the structureq part provides a means to ensure consistency across interviews. Furthermore, this kind of interview has an advantage of developing a kind of relationship with the participant where negotiation, discussion and expansion of responses may occur. On the other hand, the same author advises that semi-structured interviews should be organised in such a way that the participants have

freedom to augment the conversation with what they consider valid, if uncovering information on specific questions (2005:5).

The interview schedule was developed based on the literature review, research objectives and questions. Unlike teacher trainers, knowledgeable persons were provided with an extract of the current syllabus. This was meant to introduce them to the programme in order for them to know and understand what they were to evaluate. Both interview schedules (for trainers and knowledgeable persons) were developed in line with the questionnaires; what differed was the construction and depth of the questions (compare Addenda G, H, I & J). The interview schedule for trainers was developed such that the participants used their experience at college and in schools as they sometimes participate in the teaching practice exercise where they observe those practicing as well as interact with the graduates. The interview schedule for knowledgeable persons, on the other hand, was developed such that participants used their knowledge and understanding of inclusive education and support to evaluate the special education secondary teacher training programme in Botswana.

Like the questionnaire, the interview has both advantages and limitations and it was important that the researcher understood those beforehand. Some of the advantages and limitations are discussed next.

4.5.2.1 Advantages of an interview

Through interviews, interviewers are able to reach sample size targets and quotas can be adapted (Muijs, 2004:42); interviews yield the highest response rates (Leedy & Ormrod, 2001:196; Marshall & Rossman, 1999:116), and unlike questionnaires, interviews allow the researcher the chance to evaluate the quality of the responses of the participants, to observe if an item has not been properly understood, and to reassure and encourage the participant to fully provide an answer to an item (Walliman, 2001:239). During an interview the researcher is able to present visual signs such as nods and smiles that can influence or motivate the respondent to provide complete and reliable responses.

4.5.2.2 Limitations

Firstly, the interviewer effects may jeopardise the validity and reliability of the results. It has been succinctly stated that responses could be distorted due to personal bias,

anger, anxiety, politics, and simple lack of awareness since interviews can be greatly affected by the emotional state of the interviewee at the time of the interview. Interview data are also subject to recall error, reactivity on the interviewee to the interviewer, and self-serving responses+(Patton in McEwan & McEwan, 2003:81). In support to this idea, Connolly (2007:5) gives an example that one may respond differently to a question if it was a woman interviewing compared to if it was a man. This specifically may be observed when sensitive questions are asked. Secondly, due to time and financial constraints as well as the distance one has to travel to conduct interviews, a small sample is used for the study . and a small sample may not be representative of the ideal population. Thirdly, interviews require experienced and skilled personnel who can appropriately ask questions and make follow-ups if necessary. On this note Marshall and Rossman (1999:110) conclude that due to a lack of expertise or familiarity with local language or because of skill, the interview may not yield the intended results. Fourthly, some interviewees may be threatened by the presence of the interviewer with regards the anonymity and consideration for the personal life of the participant. The effect is that respondents will not feel comfortable to provide appropriate answers (Bless & Higson-Smith, 1995:111). Fifthly, Muijis (2004:42) thinks that an interview may be seen as intrusive and non-cooperation may result. On the other hand, cooperation is one of the important ingredients for a successful interview (Marshall & Rossman, 1999:110). Lastly an interview will require that the place and time chosen is appropriate. This is done to avoid distractions in the process and to avoid rushing through the interview since these will actually affect the results. In effect, the general preparation for the interview is crucial. Preparation may include in addition to the aforementioned, the ability of the interviewer to show thorough preparation both in the groundwork and in presenting the interview and the method of recording the responses (Walliman & Baiche, 2001:240).

4.5.2.3 Piloting of interview instruments

Unlike questionnaires, the interview instruments were not actually pilot tested. Colleagues from the Special Education Department at TCE only proofread the instruments for both teacher trainers and knowledgeable persons. Gray (2004:205) is of the idea that interview instruments can be modified if certain questions appear ineffective. Likewise, during the interviews, the researcher managed to modify or

rephrase questions that the interviewees seemed not to easily capture. The researcher however believes that if the interview schedules were pilot tested, the interviews may have run somewhat smoother. Strydom (in De Vos, 2005:294) is of the opinion that if pilot tested, researchers have the chance to familiarise themselves with the modalities and practical aspects of %establishing access, making contact and conducting the interview, as well as becoming alert to their own level of interviewing skills.+

4.5.2.4 Interview procedure

Four teacher trainers (two from each college) were interviewed. Prior to the interview, a consent letter was written to the two college principals of MCE and TCE as well as to the Director at TT&D. Furthermore, heads of departments from the two colleges were requested to use their discretion and pick two interviewees from their departments. In addition, six knowledgeable persons were also interviewed. The researcher made arrangements by phone for local interviews, phone and email for interviews outside Botswana . South Africa and Ireland. Initially the researcher planned for face-to-face interviews with both teacher trainers and knowledgeable persons in the area of study, but this was not possible with one expert who had moved from Lesotho to Ireland and an email was used instead . distance became a barrier. For the local interviews, one participant came from the Division of Special Education, two from the University of Botswana and one a Zimbabwean representative . currently working in Botswana. All the oral interviews were tape recorded for easy capturing of information. This also applies to the interview that was conducted in South Africa with one knowledgeable participant. For an email interview, the researcher sent an interview schedule to the interviewee as well as an extract of the programme. The participant then responded to questions electronically.

Data from teachers, school heads, teacher trainers and knowledgeable persons was collectively analysed. Methods of analysing data follow next.

4.6 DATA ANALYSIS

Researchers analyse data in order to make the raw data more understandable to readers. The argument by Walliman (2005:301) is that data that are not analysed do

not make sense. The same author continues to assert that analysis of any data collected must be performed in relation to the research problem. The methods used for analysis should also be linked to the nature of the research problem and specific aims of the research study. The identified main reasons for data analysis include to: (1) measure, (2) make comparisons (3) examine relationships (4) forecast (5) test hypotheses (6) construct concepts and theories (7) explore (8) control and (9) explain (Walliman, 2005:301). Furthermore, through analysis the researcher can gain insight into the existing data (Gray, 2004:327).

4.6.1 QUANTITATIVE ANALYSIS

Quantitative analysis implies the use of mathematical operations and statistical measures to investigate the properties of data gathered. For the purposes of this study quantitative analysis was employed to address responses from the close ended questions of the questionnaires. Initially the researcher had coded the data, followed by capturing it in a spread sheet, cross checking for mistakes, analysing it and interpreting. This was done in line with Durrheim's (2006, 189-193) idea of preparing, coding, entering, cleaning and analysing data. Basic descriptive statistics were used to this effect. According to Walliman (2005:304) basic descriptive statistics provide a method of quantifying the characteristics of the data, where their centre is, how broadly they spread and how one aspect of the data relates to one other aspect of the same data. Where applicable, the mode, median and mean can be calculated.

In this study, the Statistical Package for Social Sciences (SPSS) was used and mode and frequencies were calculated and information presented in tables and charts. Gray (2004:293) is of the opinion that in descriptive analysis, the use of charts or graphs provides the potential for the communication of data in readily available formats; however the choice of graphics depends on the type of data being presented. For the presentation part, where the Likert scale was used, the researcher found it appropriate to combine some numbers. For instance, in a Likert scale of 1 to 5, where 1 represented 'strongly disagree' 2 represented 'disagree' 3 represented 'neutral' 4 represented 'agree' and 5 represented 'strongly agree' 1 and 2 were combined to indicate disagreement, while 4 and 5 indicated agreement on the statement.

4.6.2 QUALITATIVE ANALYSIS

Qualitative data analysis uses words as compared to statistics utilised in the quantitative analysis. According to Gray (2004:319) words have a more concrete and vivid flavour that is more convincing to the reader as compared to information presented in numbers. On the other hand, researchers who analysed data qualitatively have noted that they have experienced challenges in the process of analysis. For instance, Gray (2004:319) reports that there are critics in terms of a lack of approaches to analyse and narrate qualitative data. Moreover, there is an element of the researcher's subjectivity in data analysis and presentation. The researcher also discovered that it is not always easy to come up with common headings or categories.

For the present study, qualitative analysis comprised of the constant comparative technique which included careful capturing of responses, grouping them under appropriate categories and patterns of similarities and differences identified. Following this, the researcher was able to generalise ideas and make discussions in relation to aims, objectives and research questions of the study. In fact, Abawi (2008:5) is of the view that this kind of analysis aims at seeking and discovering patterns of theories in data that help to explain the situation. Blanche et al. (2006:322-327) have identified steps followed in qualitative analysis and these include familiarisation and immersion, inducing themes, coding, elaboration and interpretation and checking. In fact, these are the steps that the researcher followed during analysis because initially the researcher read all the responses in order to understand them, secondly, categories were worked out, thirdly, the categories were coded, fourthly, generalisations were drawn and that followed by interpretations and conclusions. According to Walliman (2005:308), through the processes of immersion, pattern establishment, and suppression of phenomenon and inconsistencies the researcher is able to generate new concepts and theory or make further discoveries in relation to the already existing data.

The interview schedules also solicited comments from the respondents and these were also analysed qualitatively. After transcribing information from the tape recorder (trainers and knowledgeable persons interviews), the answers for each question

were put together, similarities observed and themes worked out. The researcher then used the themes to make generalisations as well as to draw conclusions.

4.7 PROFESSIONALISM AND ETHICAL CONSIDERATIONS OF THE RESEARCHER

Data was collected via questionnaires and interview schedules. Prior to collecting data, the researcher had to establish the validity and reliability of the research instruments. This was done for the purposes of checking the effectiveness of the instruments in relation to gathering the information intended for research. Bless and Higson-Smith (1995:135); Gray (2004:90) are of the view that it is important for researchers to be definite that what they use (in this case research instruments) measures what is supposed to be measured in order for them to be certain about the results. The questions for the different research instruments were constructed basing on the problem statement, research questions and objectives (content validity). Both the researcher and the promoter evaluated the content validity of the instruments by thoroughly reviewing the questions to establish whether all the areas of the research were covered and whether the collected data will produce credible results. According to Thomas (2004:81) some questions that need to be answered by those validating include (a) Does the question clearly link to the objective as intended; (b) together, do all the questions linked to an objective provide thorough coverage of the topic; and (c) as a whole, to what extent will the questionnaire yield the data required? Likewise, these are the points that the promoter in particular highlighted to the researcher.

Pilot testing was also another strategy used to detect the validity and reliability of the instruments (cf. 4.5.) for further information on piloting of instruments.

Prior to the actual research, the researcher and promoter sought permission from the different departments and ministries (cf. 4.5). Permission was sought because it is a requirement for every researcher in Botswana to justify the necessity to conduct such a research, and also for the responsible authorities to check if the research will not disclose any information not required to be disclosed. This also signified

professionalism of the researcher. Consent letters were also sent to supervisory departments and bodies that included TT&D, college principals, chief education officers as well as school heads for all the participating schools and teachers. In addition, the researcher exercised professionalism in that the names of all the participants were not in any way disclosed. According to Thomas (2004:104) research participants have all the right to confidentiality and therefore %the individual responses cannot be attributed to the respondent+. The assurance of confidentiality to teachers was done through their school heads . who on behalf of the researcher sampled teachers for the study. The school heads were requested to keep the names of the participants anonymous. Moreover, the questionnaires did not require participants to disclose their names. The researcher also adhered to confidentiality by assigning numbers rather than school names to questionnaires when entering data into the spreadsheet. This is also recommended by Thomas (2004:104) and Gray (2004:389). Furthermore the researcher did not disclose the names of the interviewees during transcribing and analysis processes.

Professionalism was also exercised during interviews. For instance, prior to the interviews, the interviewees were informed of the researcher's intention to tape record the proceedings of the interview. Gray (2004:279) is of the same opinion that participants should be made aware of any recording or monitoring methods during the entire interview processes so as to enable the interviewee chance to proceed or not to proceed with the interview. The author also advises that the recorded material should not be released by a researcher unless permission has been sought and granted by the participants and that the tape recorded information should be used for research purposes only (2004:279). The researcher promised the participants the same and has so far adhered to the promise.

Furthermore, the researcher adhered to the research ethical standards by exercising objectivity and trustworthiness especially during interviews. For instance, during interviews the researcher tried to avoid bias by allowing the interviewee, without interruption, the opportunity to respond to the questions. The researcher prompted and probed only when necessary. Trustworthiness was also shown by the researcher when identifying and describing the research methodologies used, and the whole process of research. Maykut and Morehouse (in Kgothule, 2004:132) encourage researchers to exercise transparency by discussing methodologies, and

making clear the important details of what was done and why, so as to increase trustworthiness of their work. It is also worth mentioning that the combination of research methods, employing two techniques of gathering data, and focusing on more than one group of respondents also added to the credibility of the work. In fact, the methodological triangulation allowed cross checking of evidences from different sources with regard to common questions from different research instruments. Moreover, triangulation as Gray (2004:33) agrees allowed methods to complement on any of the potential weaknesses inherent in each of them. For instance where answers from questionnaires seemed incomplete or lacked some information, the researcher cross checked with answers from interviews and substantiated on the answers from the questionnaires. Moreover, where quantitative questions were used, the researcher again made use of the qualitative responses (from similar questions) to explain or add on the quantitative responses.

The expectation of the Botswana government is that a copy of the research should be submitted to the relevant authorities, which the researcher will adhere to.

4.8 CONCLUSION

The chapter described all procedures that were used in order to carry out the empirical investigation.

In the next chapter, the results will be presented, analysed and discussed.

CHAPTER 5

PRESENTATION, ANALYSIS AND DISCUSSION OF RESEARCH FINDINGS

5.1 INTRODUCTION

The chapter aims to present, analyse and discuss the results of the empirical investigation. The empirical investigation sought to address the problem statement which suggested that the current special education programme offered at the two secondary colleges of education (MCE & TCE) may not appropriately and adequately prepare teachers to effectively provide support within the inclusive education system. Moreover, research questions as well as research objectives are also considered in the presentation, analysis and discussion processes.

Data from the different questionnaires are separately presented, analyzed and discussed, followed by the interviews with teacher trainers and then the interviews with knowledgeable persons. The results will, however, be combined in chapter six to draw conclusions and possibly suggest a more effective teacher training model for inclusive teacher training in Botswana secondary colleges of education.

For the purposes of this research, as already indicated in questionnaires (Addendum G and H), barriers to learning as opposed to, SEN is used. The researcher is, however, aware that the latter is mostly used in Botswana. The preference for the first mentioned terminology is to try and align the research with the current inclusive education debate, which according to the researcher's view emphasises the use of appropriate terminology which would not in any way hinder or somehow affect the provision of appropriate services to any of the learners requiring support.

5.2 RESPONSES FROM TEACHERS' QUESTIONNAIRES (ADDENDUM G)

The questionnaire consists of sections on general information, learners currently in classes and supported, usefulness of the programme, areas in which teachers have knowledge and skills on, knowledge and skills not covered during training, support programmes/projects initiated by teachers, influential factors to teachers' performance, assessment of the status of the programme as well as a section on recommendations for a possible improved training programme. The numbering of sections for the purposes of presentation, analysis and discussions follow the same order as in the questionnaire (Addendum G). The reader is however made aware that the section on general information served as an introduction to the participants; therefore little of this needed to be presented, analysed and discussed. The mentioned section consists of questions one to five while other sections are made of questions six to thirteen.

General information

1. Gender

F	M	Total
139	86	225

2. Institution

MCE	TCE
84	113

3. Year of graduation

2004	2005	2006	2007	2008	2009
48	52	44	34	32	15

4. Teaching experience

0-1 years	2-3 years	4-5 years	6-7 years
81	94	39	11

5. Location

(a)

Rural	Urban
151	74

(b)

A	B	C	D	E
20	47	80	64	19

Key: A . Southern region

B . South Central region

C . Central region

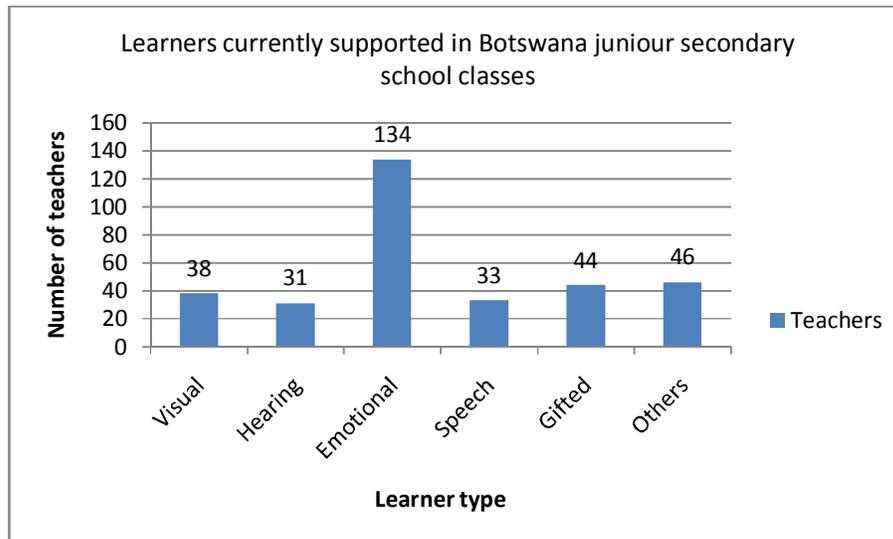
D . North region

E . West region

6. Learners currently supported

6a. Which type of learners experiencing barriers to learning do you currently have and provide support to in your classes?

Bar Chart 3:



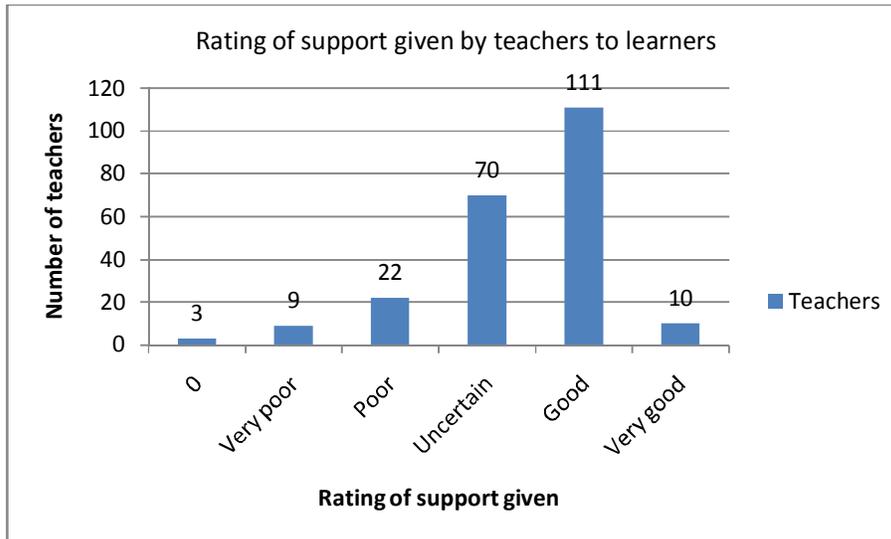
Teachers were provided with a list (Addendum G) and were also to add to the list the type of learners they currently have and provide support to in their classes. From Bar Chart 3 it is shown that 38, 31, 134, 33, 44 and 46 teachers from the sample currently had and supported learners experiencing problems related to visual, hearing, emotional, speech being gifted learners and others in their classes respectively. The results imply that teachers provided support to learners with a diversity of needs in their classes.

6b. If you indicated "others" in 6a, please specify those

Some of the teachers also indicated that they had and offered support to learners with or experiencing LDs; literacy and numeracy problems; hyperactivity disorder; physical disability; coordination problems; social and emotional problems, mental retardation and those demonstrating a negative attitude towards learning.

6c. How would you rate yourself with regards to the provision of appropriate support you offer to learners experiencing barriers to learning in inclusive classrooms and schools?

Bar Chart 4:



The results from Bar Chart 4 show that three participants did not indicate their self-rating or level of performance, 31 were of the opinion that they are poor and very poor; 70 were uncertain while 121 were of the view that they are good and very good in providing appropriate support to learners and systems within inclusive settings. This implies that the majority of teachers were seemingly doing well with regard to the provision of support within inclusive system of education. Teachers were also asked to elaborate on their responses (refer to 6d).

6d. Please elaborate on your response

Teachers who confirmed that they were good and very good in providing appropriate support stated that they had noticed progress in the learners they had worked with. They were able to: give both group and individual learners attention even though the time factor was a problem; make instructional accommodations for learners experiencing barriers to learning . consider their diverse needs; provide maximum and effective support even though at times they became irritated by learners, especially those with behaviour problems; make sure that they employed learner-

centred methods and techniques; conducted successful remedial teaching; were able to include every learner in class activities; prepare and use learning aids effectively; have established support programmes namely SIT and resourced persons at school and regional level on support to learners; learners act responsibly after teachers have talked to and provided both group and individual counselling to them (for example those who have a negative attitude towards learning, behaviour problems, social and emotional problems) and there is evidence of improvement in their results; and always made follow-ups to the identified learners and refer them to the Guidance and Counselling Department.

Teachers who reported that their performance was poor and very poor elaborated on their responses by stating that they mostly focused on capable learners and ignored others who needed intensive support to be able to perform; they hardly paid attention to individual learners due to large class sizes (45 to 50) and limited time; they had limited knowledge, support skills and strategies to provide effective support to learners; they were not doing anything at all; always referred learners to the Guidance and Counselling Department and never followed it up. Learners experiencing barriers as compared to those who do not were always left behind in the mastery of content and skills. When planning, teachers never considered diverse needs of learners (in terms of instructional methods, activities and content).

Teachers who were uncertain provided the following explanations: though they provided support, at times they ran short of strategies to employ and did not feel satisfied with the assistance they provided; they were able to consider diverse needs when planning but were unable to effectively address individual diverse needs during teaching and learning processes; they did not have adequate knowledge and special skills to support learners . and were not sure if the strategies they employed were appropriate, though some learners showed improved performance. The teachers felt they were not trained in all the areas. They were not sure if the support they provided was adequate since they had not experienced any complex issues in their classes. Learners showed fluctuating performance, sometimes good and sometimes poor, though the provided support was meant for improved performance; inclusive classes did not make provision for effective individual support; sometimes the behaviour persisted even after providing support . therefore it became difficult to know whether teachers had offered the right support or not; there was no necessary amenities and

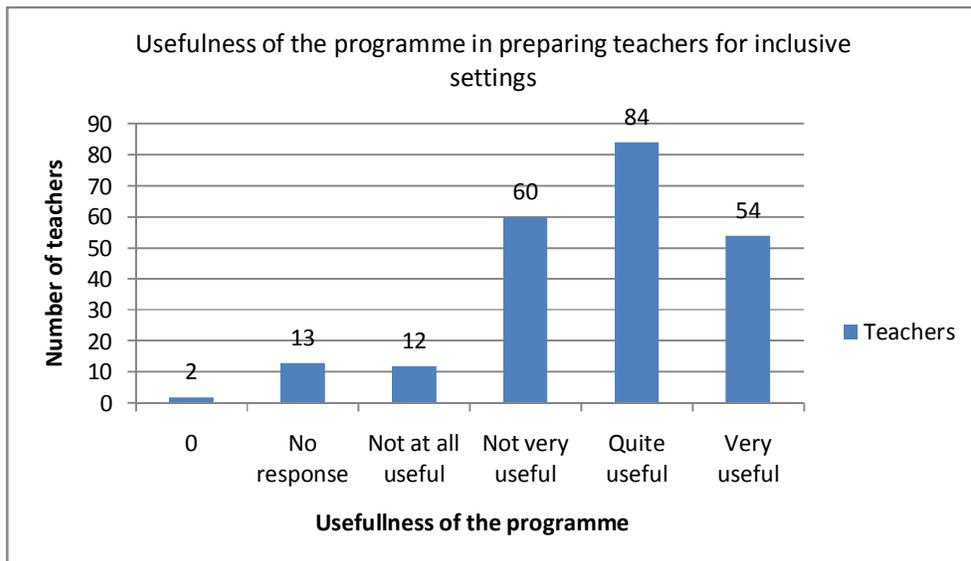
facilities to complement the support strategies that teachers came up with and if learners underperformed it became difficult to explain whether it was due to the support strategies used or lack of support material. Some schools did not have a lot of learners needing support and this made it easy to pay attention to individual learners needs; some schools did not have any support programmes or projects in place which may have affected teachers performance; their strategies did not always work; they did not think what was offered in colleges (awareness course) could prepare someone to effectively provide support to learners in inclusive settings; they were not able to provide support to those with extreme needs; provision of support was inconsistent; they never kept a record of learners they had discussions with and it became very difficult to make a follow-up and they did not offer support due to the congested syllabus.

The reader is made aware that there were those teachers who did not provide any elaboration to their responses . it may be they did not provide a genuine response in 6c. The other observation made was that teachers have associated their performance with various school factors, which will be discussed in the later part of the study.

7. Usefulness of the programme

7a. How useful was your special education programme in preparing you to teach and support those learners in inclusive classrooms and schools?

Bar Chart 5:



From Bar Chart 5, the results indicate that three participants did not respond to the question; 13 had a no response; 72 felt that the programme was not at all useful and not very useful while 138 felt the programme was quite useful and very useful. The reasons for their responses are outlined in 7b. This implies that most teachers were of the opinion that the special education programme prepared them rather well to teach and provide support to learners in inclusive classrooms and schools.

7b. Please elaborate on your response

The participants who were affirmative indicated that the programme equipped them with the basic knowledge and skills (e.g. identification, modification, preparation of learning material, referral, preparation of an IEP on how to support learners experiencing barriers to learning and development in inclusive settings; the programme made teachers to understand that it was very important to offer support to learners experiencing barriers to learning and development in order for them to perform; through the programme teachers developed positive attitudes towards learners with disabilities and were in a better position to interact with them . making it easier to support them in classes; teachers reported that they were able to cope with different situations presented by learners during the teaching and learning processes; the programme helped teachers to understand and appreciate learner differences which made them to be patient with individual learners; it prepared teachers and made them aware of different challenges they were likely to experience in the field . teachers did not easily experience burn-out when they experienced challenges and lastly, through the special education programme, teachers developed advocacy skills for people with disabilities and were able to talk to colleagues about the importance of supporting learners experiencing barriers to learning and development.

Those participants who were not affirmative stated that they lacked practical skills; during training they were never exposed to any practical work; they did not cover adequate material since the programme had a low weighting and as a result they lacked confidence in the field of special education and support services; teachers were of the opinion that what they had learnt during training was totally different from situations they experienced in the field and this made it difficult to apply what they acquired to effectively provide support; the programme did not expose trainees to all

the diverse needs that learners present within classes and this made teachers inefficient in their efforts to support learners; issues of inclusive education and support were only mentioned in passing since they were initially not included as components of the programme and this made it challenging to function in inclusive settings; trainees were only taught basics since the programme was for the purposes of awareness, and this made teachers incompetent as some of the identified barriers cannot be fully addressed by someone with limited knowledge and skills; and lastly, some felt that the programme was meant for the acquisition of a Diploma and not for equipping trainees with relevant knowledge and skills for inclusive education . hence teachers still remained ill-prepared for inclusive settings.

The respondents who opted for the no response did not give an explanation for their answer, except one who mentioned that he/she had not so far implemented what was acquired at pre-service level was but only concentrating on the teaching subject.

8. Knowledge and skills

8a. I have knowledge and skills in: (more than one option may be indicated)

The results indicate that teachers had knowledge and skills in all, some or none of the areas that were presented in the teachers questionnaire. The areas included: assessment and identification; curriculum modification/adaptation; collaboration; assistive technology; IEP and outsourcing.

8b. If you have indicated other(s) in question 8a, please specify those

- Formation and establishment of support programmes . SIT;
- utilisation of Curriculum Based Measurement tool (CBM) and
- conducting remedial teaching.

8c. Show how confident and competent you are in the skills indicated in question 8a and 8b.

Table 13: Teachers' confidence and competence in knowledge and skills for inclusive education and support.

Options	Assessment & identification	Curriculum modification/adaptation	Collaboration	Assistive technology	IEP	Outsourcing
Missing	33	108	139	138	137	143
V I	14	16	24	30	24	31
I	23	16	13	15	11	13
A	74	41	24	23	31	19
C	56	34	20	12	11	13
V C	24	10	05	07	11	06

Key: V I . very incompetent (1)

I . incompetent (2)

A . average (3)

C . competent (4)

V C . very competent (5)

Table 13 shows that more teachers were competent (C + V C) in assessment and identification as compared to other areas. It is shown that assessment and identification has 80; curriculum modification/adaptation 44; collaboration 25; assistive technology 19; IEP 22; and outsourcing, where 19 teachers felt they were competent. Assessment and identification has 74; curriculum modification/adaptation 41; collaboration 24; assistive technology 23; IEP 31; outsourcing 19 teachers who indicated that their knowledge and skills were of average level. It is also evident from the table that 38, 32, 37, 45, 45, 44 teachers felt incompetent (I + V I) in assessment and identification; curriculum modification/adaptation; collaboration; assistive technology; IEP; and outsourcing respectively. There were also those teachers who did not indicate their level of confidence and competence in the areas. For instance, 33, 108, 139, 138, 137, 143 teachers did not indicate their level of confidence and competence in assessment and identification; curriculum modification/adaptation; collaboration; assistive technology; IEP and outsourcing respectively. One may conclude that these are the teachers who did not have any knowledge and skills in these areas? Teachers were also given the opportunity to grade themselves in the areas they had identified in 8b; however, only one did and he said he was very

confident and competent in the establishment of SIT and only of average performance in the use of CBM. The results imply that teachers had different levels of competence and confidence in knowledge and skills relevant for effective inclusive education. The results show that most of them were at an average level.

8d. Please motivate well why you allocated a specific rating in 8c.

Refer to Table 14 for teachers' motivation

Table 14: Teachers' motivation for their level of confidence and competence in the knowledge and skills for inclusive education and support.

Knowledge and skills	Rating & Motivation
Assessment and identification	C + V C . teachers were able to correctly identify and assess learners in need of assistance; had successfully identified all learners in their classes who experienced some form of difficulties and referred them for further assessment; had developed effective strategies to identify and assess learners (observe how the learner interact with others, general behaviour, performance);
	A – teachers were able to identify some learners but were not good at assessment; they were not familiar with certain barriers and this made it difficult for them to identify all learners in need of support; it took a long time before learners could be identified; had good interaction with learners and this became handy for identification purposes; the exercise was not done often;
	I + V I . teachers found it very difficult to identify & assess learners; they were not always able to pick learners with difficulties; they could only identify those learners with obvious signs; they had no knowledge and skill to perform the exercise.
Curriculum & content modification/adaptation	C + V C . teachers had observed that the strategies they employed to adapt & modify content had proved to be productive; they were able to plan and use various teaching techniques suitable for individual diverse needs; they had successfully prepared for and carried out remediation and enrichment activities;
	A . teachers had little knowledge and skills that were useful; at times they found it difficult to modify/adapt content so that it met the learners' needs; they were able to simplify language to the level of learners;
	I + V I . teachers had little knowledge and skills in the area; they were only able to modify content to an extent which at times was not effective; some tried to do it many times but without success . learners still struggled to understand the content; others stated that they rarely modified/adapted the content.
Collaboration	C + V + C . teachers had collaborated with colleagues to establish SIT and always networked with other knowledgeable people in the area of special education; they were able to share ideas with colleagues and also asked for assistance when they had difficulty in addressing a situation; teachers interacted well with learners and were able to share ideas with them.
	A . they had sound communication skills that made it easier for them to approach colleagues;
	I + V I – some were not sure about their skills; they rarely engaged in collaboration.
Use of assistive technology	C + V C . they were able to use assistive technology extensively; learners had shown improvement in performance when assistive technology was used;
	A – teachers managed to demonstrate to learners how certain assistive technology is operated; they were only able to effectively use computers . no knowledge in other assistive technology;
	I + V I . they did not use technology quite often due to limited resources; they had little and scanty information on the use of assistive technology; teachers had no practical skills to operate and demonstrate to learners how each device works; they had basic skills in computers only; and some had no knowledge on the use of assistive technology.
Development & implementation of IEP	C + V C . teachers understood all the stages involved in developing and implementing IEP; they were able to clearly define the learners' needs before devising an instrument; were able to design learner-centred activities (e.g games, puzzles) suitable for an IEP;

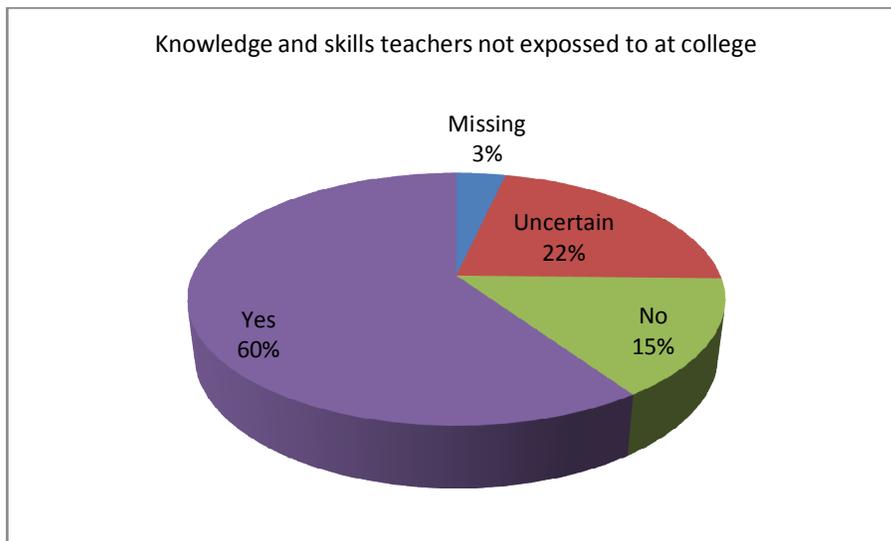
	A . they had started using IEP for learners and had observed some improvement so far on their performance;
	I + V I – teachers had not used IEP so far; they were not able to prioritise the needs in order to develop the IEP; had little experience that they were not able to use effectively to implement IEP; some did not understand many concepts of the IEP.
Obtaining resources from the community (outsourcing)	C + V C . they had established working relations from the community and were able to freely request for assistance;
	A . effectiveness was affected by lack of parental/community involvement; never had any difficulties to discuss with members of the community who had knowledge and ideas on special education; had at times requested for support material from outside the school;
	I + V I – not done so far because of lack of knowledge on how to go about it; very rare for teachers to seek assistance and support from outside the school; they found it difficult to search for support from outside.
SIT	C + V C . others had successfully established SIT in the school and had since been resourcing colleagues in the nearby schools;
	A – no response;
	I + V I – no response.
CBM (Curriculum Based Measurement)	C + V C – no response;
	A – no response;
	I + V I – had encouraged colleagues to implement CBM.

From Table 14 it is evident that teachers' level of competence and confidence in different areas vary. What is of most importance is that teachers are able to explain their level of competence and confidence. The results may indicate to curriculum planners the areas in the current programme that need more attention so that teachers are adequately prepared to function in the inclusive education system. Moreover, the schools may consider these areas to plan continued staff development activities since the results will serve as the teachers' inventory of needs in as far as their training is concerned.

9. Knowledge and skills teachers were not exposed to at college

9a. Do you feel there are other special education knowledge and skills that you were not exposed to during your pre-service training that would help you to effectively support learners experiencing barriers to learning and colleagues in inclusive classrooms and settings?

Pie Chart 1:



The information from the Pie Chart 1 depicts that 60% of the participants were of the opinion that there are other special education knowledge and skills that they were not exposed to during pre-service training that would help them to effectively function in inclusive settings; 15% felt they were exposed to all the knowledge and skills relevant for inclusive education; 22% were uncertain while 3% did not indicate how they felt. The results from the sample imply that a large number of graduates did not acquire all necessary knowledge and skills relevant for inclusive education during their pre-service training.

9b. If your answer to question 9a is “yes”, please indicate those

Teachers indicated that they were not exposed to knowledge and skills on:

- Material production;
- Guidance & Counselling;
- communication (sign language, lip-reading, Braille);
- infusion of life skills in every day teaching and learning;

- interaction with learners;
- inclusive education (knowledge and support skills for learners with diverse needs in inclusive settings);
- working with parents;
- establishment of support programmes;
- motivational skills (to change learners' attitudes towards learning) and
- programmes for the gifted and talented learners.

9c. If your answer for question 9a is "no", please elaborate on your response

Those participants who felt that there are no knowledge and skills which were not covered in their pre-service training explained that they have never come across a situation that was totally unique to what they learnt at college; they thought the knowledge and skills acquired during pre-service had been helpful in relation to provision of support to learners; the programme covered a wide range of knowledge and skills, the reason for teachers' incompetence is probably that the programme was not given more recognition and enough time; the programme covered real life aspects that made it easier for graduates to relate them well to barriers experienced by learners and to be able to come up with support strategies. Lastly, teachers have some knowledge and skills in each of the many areas which they think are of importance . especially in inclusive classes.

9d. If your answer for question 9a is "uncertain", please elaborate on your response

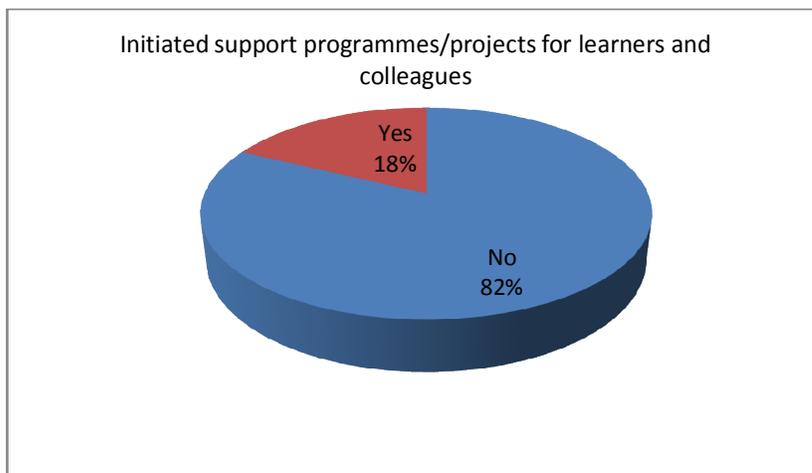
The results show that some teachers felt uncertain because they could not state which knowledge and skills they were lacking, though on the other hand they were not satisfied with the support they provided; they were also of the opinion that they were not sure of the knowledge and skills appropriate for inclusive education, so it was very difficult for them to identify the ones they missed; the other explanation was that they had not experienced any complex situations that really challenged their confidence and competence, therefore they were not able to tell if the programme equipped them with sufficient or insufficient knowledge and skills; they were not sure of any insufficiency in the programme since they had not been involved with the provision of support due to lack of time; they had not experienced different learning barriers from the ones the programme addressed, hence they had been successfully

using the knowledge and methods acquired during pre-service training; there were only a few cases that teachers found difficult to understand and address; others had been in the field for a very short time, so they had not experienced much in terms of support provided to learners and related systems . and lastly, teachers stated that they had not experienced any situations they would not be able to handle.

10. Initiated support programmes/projects

10a. *Have you been able to initiate support programmes/projects in your school to effectively support learners experiencing barriers to learning and colleagues within the inclusive system of education?*

Pie Chart 2:



The results from Pie Chart 2 as established by the empirical investigation show that there are teachers who had and those who had not initiated support programmes/projects in their schools for effective support of learners and colleagues. Those whose responses were affirmative made up only 18% of the sample. On the other hand, 82% of the sample indicated that they had not been able to initiate any support projects in their schools. The results imply that a large number of graduates had not been involved in the formation of support programmes/projects. The reasons for this will follow in 10c.

10b. *If affirmative, indicate programmes/projects you have initiated*

- Support programmes/projects for gifted and talented learners (enrichment);
- remedial support;

- collaborative teams with other schools, specialists and hospitals;
- identification and referral;
- SITs;
- literacy training;
- mentoring;
- life skills training;
- staff development;
- upgrading of the learning environment (e.g. building of ramps);
- language development (English speaking policy) and
- social welfare support

10c. If not affirmative, what do you think contributed to this?

Teachers presented many reasons for their failure to initiate support programmes or projects. For instance, they indicated that they lacked knowledge and skills in the area of support programmes or projects; lacked knowledge and skills about special education; had not yet come across serious situations that necessitated establishment of support programmes or projects; shortage of resources and support material; lack of time due to a loaded school programme; no current programmes that motivate teachers to start on support programmes; no learners who are in need of support in the school; lack of team work in the school; lack of interest from colleagues; focus is only on the normal learners since schools are results-driven; the responsibility lies with the Guidance and Counselling department; lacked confidence to initiate; no supervisor for special education who can coordinate special education programmes or projects; a congested and inflexible curriculum; lack of recognition by supervisors even when someone has some ideas; teachers still new at school; no support from the SMT; felt it is not their responsibility as they were not specialists and therefore they did not have any commitment to do such; learners had not been identified; negative attitudes from parents and lack of parental support; shortage of staff . heavy load; geographical location of the school; de-motivation by learners who do not value learning; no self-motivation to provide support; not a member of the committee that is currently taking care of support services; learner drop-out; the school does not view special education and support as a concern; lack of funds to start the programme; lack of specialists to provide teacher support; new ideas may not be bought by the old staff . resistance to change; lack of external

support and interest from departments and divisions (at national level) responsible for special education and support services and lastly, learners are overwhelmed by many other activities, so they do not find time to attend to support sessions . this demoralises teachers who wished to continue with support.

11. School factors affecting teachers' performance within the inclusive environment

What factors in the school positively or negatively affect your performance in effectively providing support to learners and colleagues within an inclusive learning environment? Refer to Table 15 for factors.

Table 15: School factors affecting teachers performance in the field

Positive factors	Negative factors
Willingness of teachers to support learners and colleagues	Unavailability of specialist personnel in the school to support general education teachers
Positive attitudes towards learners experiencing barriers to learning and development	General lack of knowledge about inclusive education in school
Determination to provide support to learners . by the whole school community	Lack of staff development activities (in-service training)
Support from the SMT	Difficulties in identifying learners . no assessment/referral committees
Existence of the special needs office . teachers know where to ask for assistance	Lack of resources (support, reference material and equipment)
There are specialist teachers who coordinate special education activities in the school	Lack of cooperation among teachers (no team work)
Those teachers willing to initiate support are highly encouraged	The poor attitude of learners towards school work
Existence of support programmes (remedial, enrichment, tutorial, , IEP, SIT, circles of support)	Teachers overwhelmed by high work load
Supportive Guidance & Counselling department	Lack of time
Early identification of learners leads to early support	Lack of support from the supervisory departments and divisions with regard to special education and support services
Collaboration with teachers, other stakeholders, organisations and departments	No support programmes in school for learners experiencing barriers, SIT not functional
Cooperation from learners	Large class sizes
Friendly working environment	Inflexible and congested curriculum
Staff development workshops	Lack of support from the SMT
Team work	Unwillingness of the SMT to adopt new suggestions
Learners are included in general classes . teachers are interested in inclusive learning	Special needs education not a priority, only Guidance & Counselling is recognised
Hard working teachers . always try to find time to assist learners though they have high loads of work	Poor learning and working conditions . physical structures not accommodative to all learners
Good communication channels	Lack of parental involvement and support . at times teachers lack information about learners which parents can provide
Availability of learning and teaching material suitable for inclusive classes (internet is very useful)	It takes a long time for identified learners to be assisted
There is only a few number of learners who	Some learners do not attend remediation

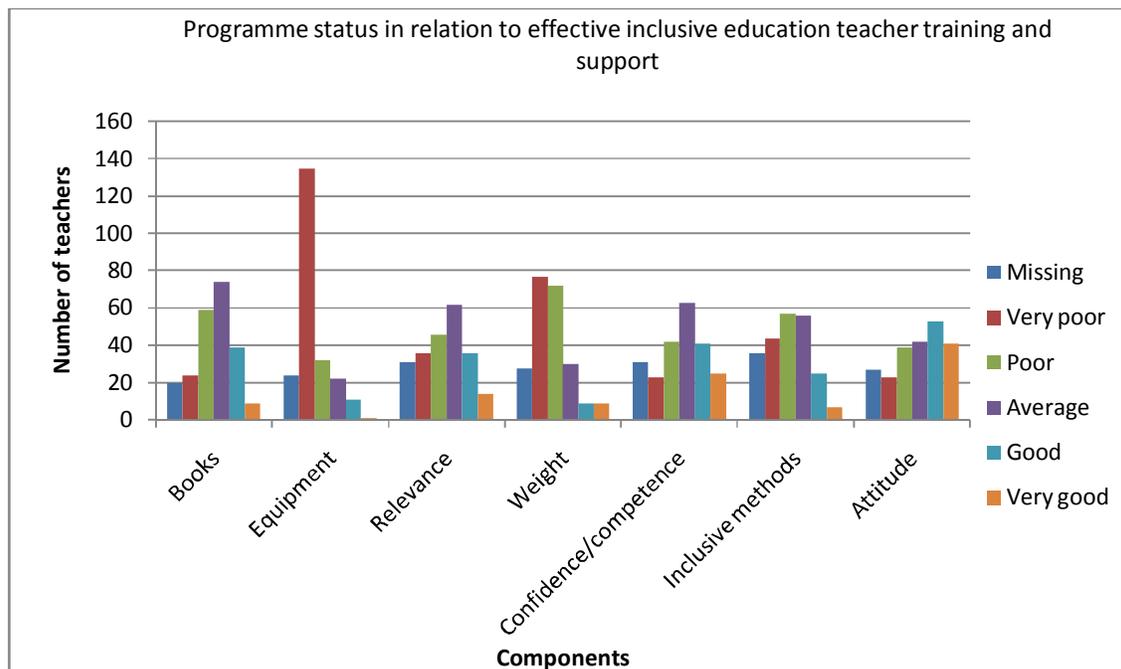
need support	effectively
Staff development programmes (internal workshops)	No commitment from school as a whole towards learners experiencing barriers to learning
Average knowledge and skills from college graduates on inclusive education	No guidelines on how to support learners
Parental and other related stake-holders support	No referral forms that can be used for referral purposes
Provision of support is open to all not only specialists	Lack of department that is specifically for special education and support services
Active health workers	Geographical location . hindrance in accessing available resources
Sharing of the available resources in the school	Severe learner conditions that need specialists
Motivational talks on issues of special education and support	Some learners are not comfortable to be given special attention
	Some learners are not willing to talk about their problems and others are in denial
	Delayed assessment by Social workers and Guidance and Counselling office
	Teachers have given up on these learners experiencing barriers to learning and development
	Student indiscipline
	Policies which are never implemented

It is evident from Table 15 that despite the current status of the programme, teachers performance is also influenced by numerous factors in schools. The factors may either be positive or negative. This may probably imply that during pre-service training, it is necessary for the programme to prepare teachers to address the challenges they are likely to experience in the field. The implication may also be that it is very important to consider communities or schools needs when developing teacher training programmes. It is also anticipated that the relevant authorities may use these results as a basis for addressing barriers to effective implementation of inclusive education and support.

12. The status of the current special education programme in relation to teachers' effectiveness in inclusive settings

Please use the following components to assess the status of the special education programme you underwent at college – and also indicate the effects it has on teacher effectiveness to provide appropriate support to learners and systems in inclusive settings.

Bar Chart 6:



Bar Chart 6 shows that 81 teachers were of the opinion that the status of books was very poor and poor, 77 said it was average while a lesser number of teachers (45) felt that the status was good and very good. The results also indicate that 175 teachers felt that the status of equipment and resource rooms was very poor and poor, 20 said it was average and 10 stated that the status was good and very good. It is also evident from the chart that 81, 60 and 56 teachers felt that the relevance of the special education programme content and methodologies to inclusive education was very poor and poor, average and very good and good respectively. Moreover, the participants indicated that the status of the weight and attention given to the programme was very poor and poor (155), average (37) and very good and good (16). From the chart it is also indicated that the status of lecturers confidence and competence was very poor and poor (60), average (62) and very good and good (66). The status of the utilisation of inclusive methods and behaviours during training as depicted in the chart was very poor and poor (100), average (57) and very good and good (27). The attitude of trainees was said to be very poor and poor by 59, average by 41 and very good and good by 100. There were teachers who did not

evaluate the status of the programme, and the numbers are shown as missing in the chart. The observation made is that from the seven evaluated items, five of them had predominantly a very poor and poor status, one had average and the other very good and good. The general implication is that the status of the special education programme in terms of these components, was to a greater extent very poor and poor.

The effects of the status of the programme components are reflected in Table 16.

Table 16: Effects of the status of the programme components on teacher effectiveness

Components	Effects		
	Very good/Good)	Average	Poor/Very poor
Books	<p>Exposed trainees to useful information on special education and support . able to provide effective support</p> <p>Helped trainees to learn and understand more about learners experiencing barriers to learning and development . are able to effectively cater for learners needs in and outside class</p>	<p>Trainees learnt some of the important concepts of special and inclusive education . assist teachers to a greater extent in inclusive classes</p> <p>Trainees were better sensitised on issues of special and inclusive education . graduated with the right mindset and do not experience burn out more often in the field</p> <p>Developed positive attitude towards learners experiencing barriers to learning . easy for teachers to support those</p>	<p>Lack of relevant and appropriate knowledge in the field . incompetent teachers</p> <p>Trainees were de-motivated to learn . less or no acquisition of knowledge and skills relevant and necessary for effective support</p> <p>Trainees did not have access to more information about Botswana (most books were about special/inclusive education in other countries) . teachers meet very unique situations in schools and are unable to address those</p>
Equipment	<p>Trainees were involved in hands on activities . teachers are able to remember what they learnt and are better placed to provide effective support.</p> <p>Teachers are also able to advice SMT on the type of equipment needed in order to provide effective support to learners.</p>	<p>Managed to practice using some available resources . acquisition of practical skills on the use of devices and teachers are able to assist learners to some extent if there is need.</p> <p>Teachers face challenges in case they come across equipment they did not have and practice on during training</p>	<p>Trainees found it difficult to understand some of the theory presented . less equipped in other areas, leading to inefficiency</p> <p>No demonstration . trainees did not acquire practical support skills.</p> <p>Trainees did not learn how to use assistive technology and specialised equipment . not in a position to use those in the field even if available or guide learners on how to use those</p> <p>Lack of motivation and interest to provide support because teachers do not know and understand how equipment is used</p>

Relevance	<p>Trainees have very good foundation on inclusive education . able to provide effective support within inclusive settings and find it easy to interact with learners</p>	<p>Teachers lack competence in the area of inclusive education Only theory was learnt . ineffectiveness in content delivery Exposed trainees to knowledge and skills in managing and catering for inclusive classes . teachers are to an extent better placed to handle inclusive classes Learnt about support programmes (SIT) . teachers have used the knowledge to form and implement SIT in their schools</p>	<p>Lack of knowledge and appropriate methods for inclusive education . teachers do not appreciate having learners experiencing barriers in their classes, they face great challenges in classes</p>
Weight and attention	<p>Trainees gained some appropriate knowledge and skills . are able to function in inclusive settings</p>	<p>No response</p>	<p>Trainees could not learn concepts in detail . less competent in the subject. Trainees did not have positive influence regarding provision of support to learners Led to negative attitude towards special education and support</p>
Confidence/ competence	<p>Trainees acquired more and relevant information . more competent and confident products Trainees developed interest towards inclusive education and related aspects . easy for teachers to adjust to situations, hence they are able to function effectively in inclusive classes and schools Built confidence in trainees . teachers are able to confidently offer support</p>	<p>Some components were not addressed fully . teachers lack confidence and competence in those Trainees were able to copy some useful ideas for handling inclusive classes . they are modelling those in the field and have so far done well in their classes Trainees were exposed to low standard information . makes teachers not to be able to address challenges extensively</p>	<p>Trainees took the course for granted and never put effort to learn more knowledge and skills . less effective in the field Trainers lacked information on other aspects and so were trainees . teachers are not able to provide support with regard to the aspects they were not effectively taught</p>
Inclusive methods	<p>Experienced inclusive methods and behaviours . model the same and have noticed improved performance of learners. Teachers have learnt to appreciate and value learners experiencing barriers to learning</p>	<p>Limited acquisition of relevant methods . ineffective teachers. Able to employ some of the methods that were learnt during training</p>	<p>No demonstration of inclusive methods, trainees could not learn and copy the right methods . unable to handle inclusive classes</p>

Attitude	<p>Developed a positive attitude in relation to provision of support within inclusive settings.</p> <p>Enabled trainees to read and learn more on the subject . increased competence and are able to effectively assist learners</p> <p>Influenced trainees to have positive expectations with regard to learners performance . teachers are encouraged to assist learners since they are aware they have potential</p>	<p>Trainees were able to learn and understand different problems learners experience . learnt to appreciate learner differences and consider those when planning</p>	<p>Did not put effort to learn and understand the subject . lack knowledge and skills to effectively support all learners in need of support.</p> <p>Developed negative attitude towards the inclusion of learners experiencing barriers in general classes and schools . teachers still feel learners in their classes are misplaced, they do not provide the needed support to them</p>
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The results from the Table 16 show that the current programme has both strong and weak areas. It is therefore up to the relevant authorities to strengthen the already identified strong areas and also to try and eliminate the weaknesses with regard the status of the programme. The strong areas (though limited) may probably imply that the programme is somewhat aligned to inclusive education and support.

Some of the participants did not explain the effects, though they had indicated the status of a component. It might be that they have not been involved in providing support.

13. Recommendations

Please make recommendations in relation to the special education programme so that it better equips teacher trainees with the necessary and relevant knowledge and skills for an inclusive system of education and support.

The recommendations are as follows:

- The programme should have fully fledged components on inclusive education and support;
- training should be inclusive (demonstration of inclusive methods, behaviours and attitudes by trainers);

- the trainers should be competent and confident on the issues of inclusive education and support and should model inclusive methods and behaviours;
- increase in the number of trainers so that they are able to function effectively;
- institutions should admit trainees with special needs so that trainees get used to the idea of inclusive education and also learn to work with such people;
- the programme should include modules that will help trainees to develop positive attitudes towards inclusive education;
- some inclusive education modules should be infused in other subjects;
- the weight of the course should be increased (awarded more time, improved assessment and examinations);
- the programme should have more emphasis on practical work and skills;
- trainees should undergo an internship, should regularly visit schools where inclusive education is effectively implemented to experience and complement their theoretical knowledge;
- trainees should undergo workshops on inclusive education and support during training;
- trainees should have the opportunity to specialise ;
- there should be specialist trainers who can address issues in depth;
- it should be studied by trainees with interest only;
- knowledge and skills on assessment and identification, IEP, support programmes/projects, life skills, communication skills such as sign language and Braille should be given more attention;
- it should be a fully-fledged and not an awareness course;
- each institution should have a unit of special education, well-equipped resource room where trainees can practice (a trainee should have a learner attached to him/her during training and should at times visit the special unit);
- it should have a research component like other subjects and
- trainees should have access to a library which should be well-equipped with books and related resources on inclusive education and support, and a more Botswana-focussed collection would be of great help.

In summary, teachers' responses indicate that to some extent the current programme has enabled them to effectively provide support within the inclusive education system. For instance, some teachers have indicated that they have knowledge and skills relevant and necessary for provision of support within the inclusive education system. These knowledge and skills were also identified through the literature that they are essential for any teacher working in inclusive settings. It is also evident from the results that the current programme is not achieving its intended objective of producing well-prepared and informed teachers due to various institutional factors, both human and material. It was also learnt from teachers' responses that there are some features that show that the current programme is to some extent not aligned with inclusive education and support. For instance, the training model is not appropriate as inclusive methods and behaviours are not well demonstrated during lectures, the area of inclusive education and support is not adequately included in the programme and also that trainees are not given the opportunity to visit schools and interact with learners within inclusive settings. As a result teachers experience challenges while trying to provide effective support to learners and systems in need. The other observation made is that teachers' performance in the field is also affected by factors ranging from personal, school and national level.

5.3 RESPONSES FROM SCHOOL HEADS QUESTIONNAIRES (ADDENDUM H)

The school heads questionnaire comprises sections on general information, teachers' keenness to provide support, teachers' helpfulness to colleagues, initiated programmes/projects, adequacy of knowledge and skills, general teachers' performance, encouragement from the School Management Team (SMT), influential factors to teacher performance in the field, and recommendations for an improved training model. The section on general information consists of questions from one to four, while other sections are made up of questions five to eleven. For the same reason mentioned in 5.2, there is no serious need for presentation, analysis and discussion in relation to the section on general information. The numbering of sections takes the same format as in the questionnaire (Addendum H).

General information

1. Age

-35 years	35-40 years	41-50 years	51-60 years	61+	Missing	Total
3	4	47	15	0	5	74

2. Gender

F	M
26	43

3. Period in current position

0-5 years		6-10 years		11-15 years		16-20 years		21+ years	
F	M	F	M	F	M	F	M	F	M
12	24	7	5	5	8	0	4	2	2

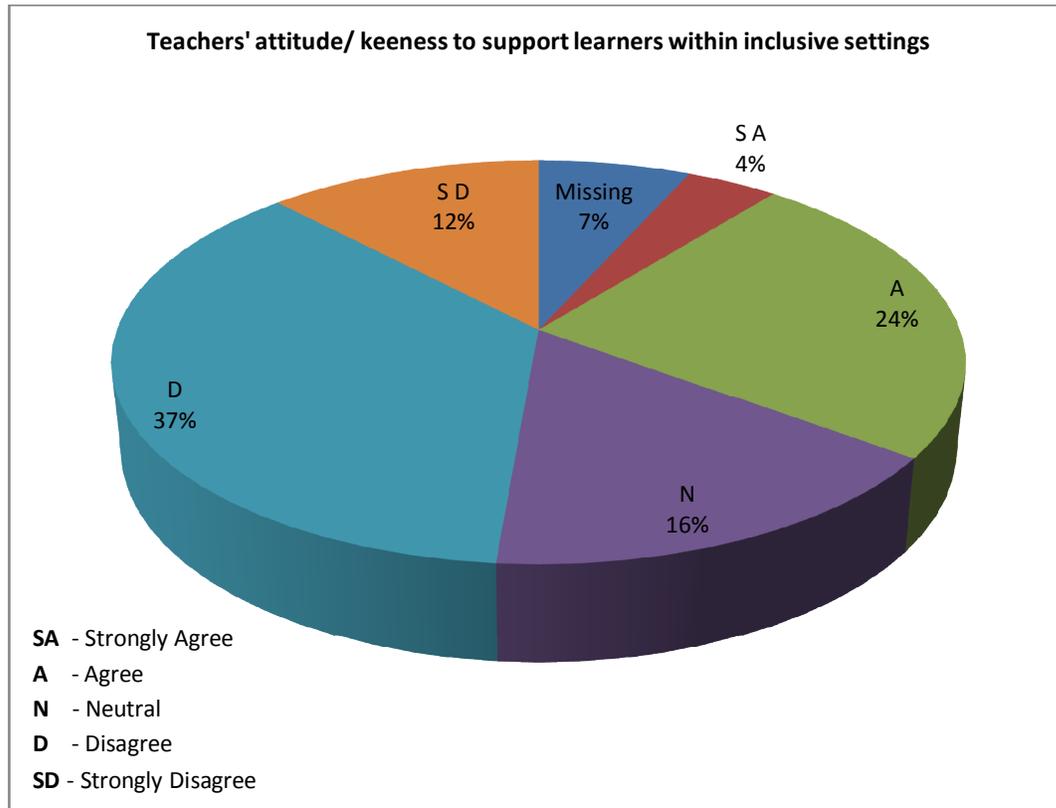
4. Knowledge level on inclusive education and support

Exceptional	High	Average	Uncertain
2	19	30	18

5. Teachers' keenness to provide support

5. Teachers are keen to provide support to learners experiencing barriers

Pie Chart 3:



The results from Pie Chart 3 show that 28% of the sample was positive that teachers were keen to provide support to learners, 49% of the sample was negative, 16% neutral, while 7% did not indicate their stand. This implies that a large number of teachers were not keen to provide support in inclusive classes, according to their heads. School heads elaborated on their responses to this effect (see 5b).

5b. Please elaborate on your response

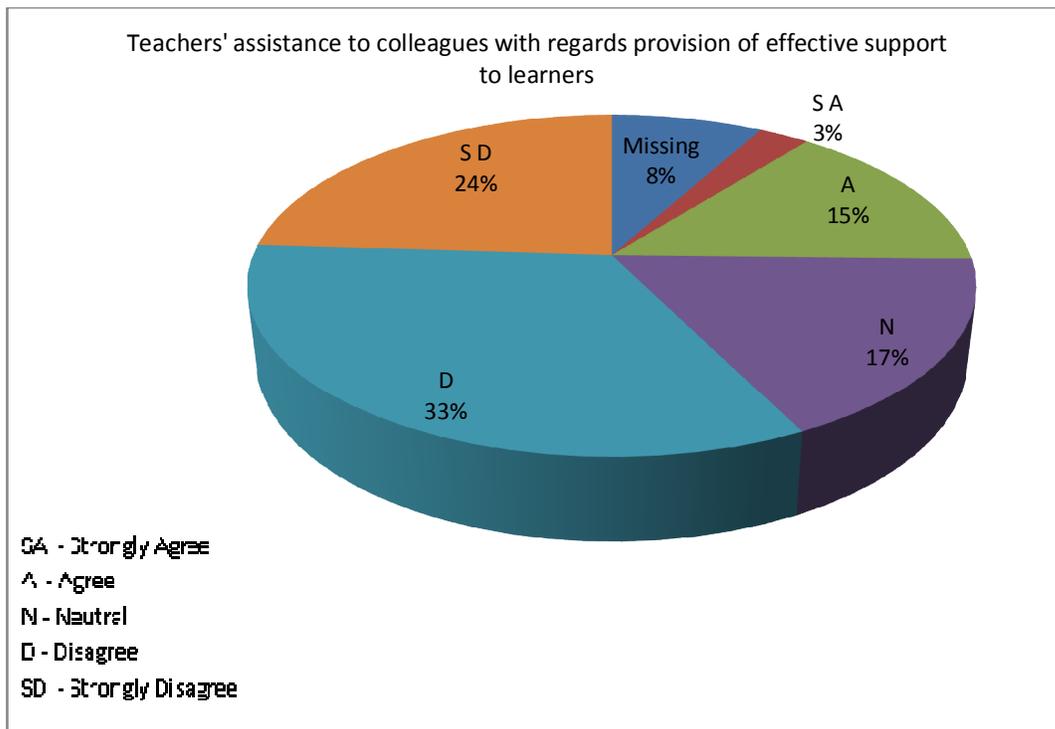
Those who were positive stated that teachers were keen because they tried by all means to assist learners; they were involved in support programmes (SITs) and remedial teaching, for example; showed interest and concern especially if it is LDs; teachers were able to identify learners experiencing barriers and involved those

during teaching and learning; teachers always provided reports about those who needed further assessment; they attempted to differentiate teaching approaches during lessons with the aim to cater for diverse needs. On the other hand, school heads who were not affirmative indicated that teachers only focussed on the gifted and average learners; they were not committed and were impatient and frustrated to assist individual learners; they always referred learners; those with knowledge and skills did not practice what they learnt, they still used the old traditional teaching methods that do not pay attention to individual needs; teachers showed negative attitudes towards including learners experiencing barriers in their classes to an extent that they labelled them as failures; teachers did not show any initiative in establishing support programmes as well as in carrying out action research to find out why many learners experience LDs. They were also of the opinion that teachers were keen when they joined the field and their keenness deteriorated with time. One may want to know why this happens.

6. Support to colleagues who did not undergo the programme

Teachers have been helpful in assisting colleagues who did not study special education

Pie Chart 4



From Pie Chart 4 it is indicated that 18% of the school heads agreed and strongly agreed that TCE and MCE graduates support their colleagues who did not undergo training in special education, 57% disagreed and strongly disagreed, 17% were neutral while 8% of the population did not provide responses. The implication is that to a larger extent graduates did not assist their colleagues on issues of special education and support. There could be many reasons attached to this situation (see 6b for further explanation).

6b. Please elaborate on your response

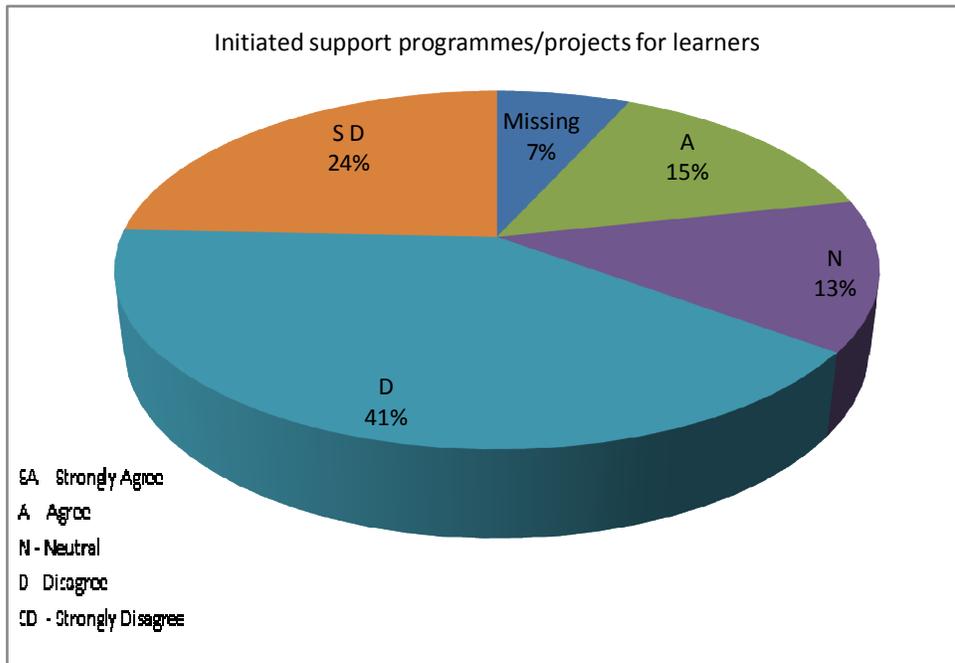
A few reasons were given in support of the statement. School heads reported that TCE and MCE graduates support their colleagues because they staged workshops, for instance on identification and support strategies; shared ideas with colleagues during staff meetings and had established support programmes similar to SITs. School heads who were of the opinion that graduates were not supportive to colleagues indicated that they never witnessed nor experienced any effort to that effect; teachers only concentrated on their subjects and did little on special education; they never demonstrated team work; they had not established any support programmes in schools nor did they get involved in support programmes and committees; teachers saw the whole exercise as a waste of time and as such they never devoted any of their time to assist colleagues; teachers sat back instead of demonstrating their experiences and knowledge to colleagues . they never disclosed to anyone that they had knowledge and skills in the area.

7. Support programmes/projects to learners

7a. Teachers have initiated support programmes/projects for learners

The results as presented in Pie Chart 5 show that 15% of the sample agreed and strongly agreed that teachers had initiated support programmes or projects to enable effective support to learners within an inclusive learning environment. Those who were not affirmative made up 65% of the population, while 13% were neutral and 7% did not respond to the statement. The results imply that mostly graduates did not initiate support programmes or projects for effective implementation of inclusive education and provision of support to learners.

Pie Chart 5:



7b. If you agreed/strongly agreed in question 7a, please indicate the support programmes/projects initiated

Some of the participants indicated that teachers have initiated support programmes or projects for learners. The support programmes or projects cited include SITs; IEP; Literacy; and Remedial teaching. On the other hand, an overwhelming majority of school heads did not agree that teachers have initiated programmes or projects to support learners experiencing barriers to learning and development.

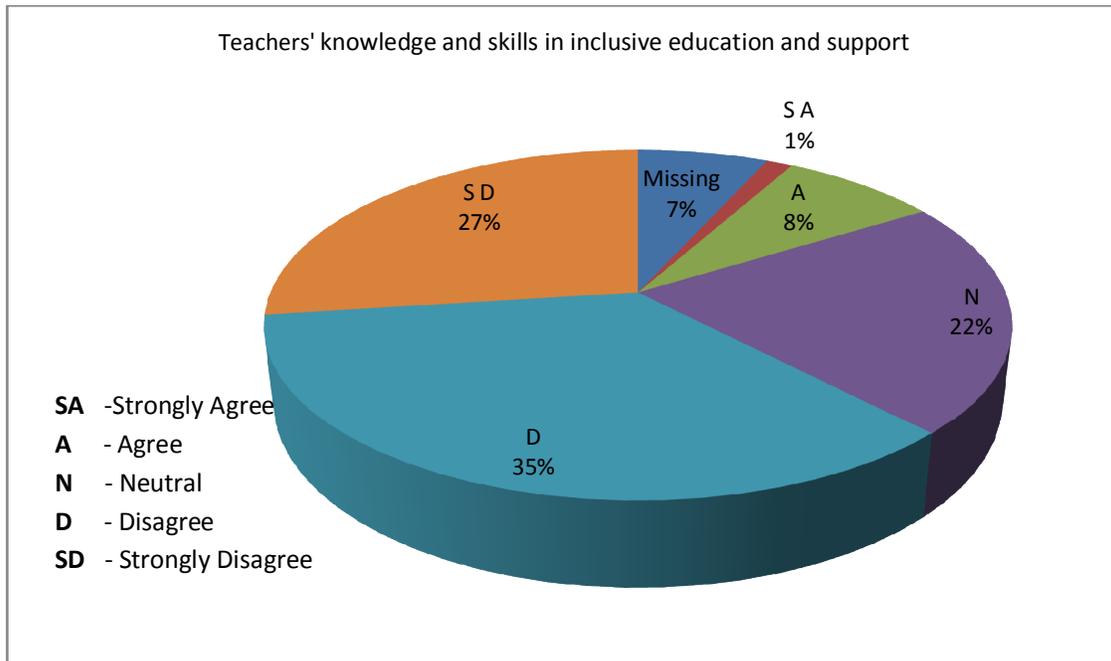
7c. If you strongly disagreed/disagreed in question 7a – what do you think contributes to this?

Reasons attached to lack of initiated programmes or projects include among others teachers' lack of or inadequate knowledge on special education and inclusive education; teachers' negative attitudes; teachers' lack of commitment and motivation towards any programme aimed at giving support to learners . and where priority is only given to syllabus coverage; lack of initiative; teaching load that is high; lack of or inadequate resources; environment that is not supportive and lastly, large class sizes that have a great impact.

8. Adequacy of teachers' knowledge and skills necessary for inclusive education and support

8a. Teachers have adequate knowledge and skills in special education that help them to effectively support learners experiencing barriers to learning and other systems in inclusive learning environments.

Pie Chart 6:



According to the findings of the empirical investigation as presented in Pie Chart 6, 9% of the participants were affirmative, 62% were not affirmative, 22% were neutral, while 7% did not provide their responses. The implication of the results is that a significant number of graduates did not have adequate knowledge and skills necessary for effective implementation of inclusive education and provision of support.

8b. Please elaborate on your response.

The participants who were affirmative noted that during planning and evaluation meetings teachers raised pertinent issues on special education and support and this reflects that they had knowledge and skills. Furthermore, it was mentioned that teachers themselves confirmed that they had adequate knowledge and skills. The other reason that made these participants to believe that teachers had adequate

knowledge and skills was that teachers went well prepared for lessons, especially during their teaching practice. It was also highlighted that teachers seemed to better understand how to teach classes consisting of different learners who have diverse needs. The school heads stated that teachers are only discouraged by factors that included large class sizes and poor remuneration.

School heads who were unsupportive of the statement elaborated that teachers had not demonstrated any supportive knowledge and skills; teachers seemed to have given up on some learners, especially those with literacy problems; teachers struggled to teach and manage inclusive classes; teachers %bid+. they did not want to show they studied the programme; they only concentrated on daily classroom teaching and always complained that they did not have the relevant knowledge and skills in the field of special and inclusive education.

8c. If your answer for question 8a reflects strongly agreed/agreed, please indicate the skills you have observed.

Identified skills included:

- Skills on handling group work
- skills on identification of barriers
- skills on guidance and counselling and
- skills on differentiated teaching

8d. If you strongly disagreed/disagreed in question 8a, what skills do you think teachers should be equipped with to be able to effectively support learners and systems in an inclusive learning environment?

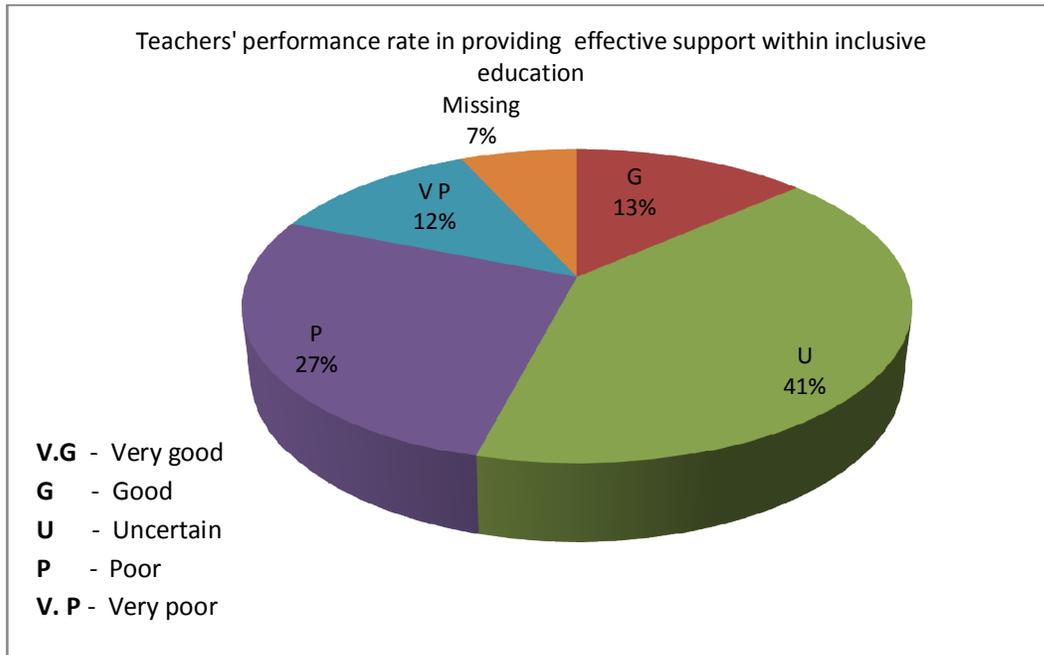
Recommended skills were as follows:

- Guidance and counselling skills
- differentiation skills;
- identification skills;
- Braille skills;
- sign language skills;
- literacy skills;
- IEP skills (preparation and implementation);
- assertiveness skills;
- resourcing skills;

- skills to handle inclusive classes and
- skills on child development

8e. How would you rate teachers' performance with regard to supporting learners and other systems in an inclusive learning environment?

Pie Chart 7:



It is evident from results as depicted in Pie Chart 7 that school heads who were of the opinion that teachers' performance was good and very good made up only 13% of the sample; 39% responded by stating that teachers' performance was very poor and poor, 41% represents the sample which had a neutral feeling, while 7% did not respond. The results as indicated imply that to a large extent teachers underperform in the area of inclusive education and support.

9. Encouragement by the Senior Management Team – SMT

9a. As the school head – together with the entire senior management team (SMT) - how have you encouraged teachers in their effort to effectively support learners and systems in an inclusive environment?

The gathered information indicates that not all schools support teachers in their effort to provide effective support. In fact, some of the school heads revealed that the SMT at their schools had not encouraged teachers at all. Some stated that the only thing they have been doing was to talk to teachers to include learners because none of the members of their SMT had appropriate knowledge on issues of inclusive education and support. On the other hand, there were school heads who said that SMTs from their schools had encouraged teachers in their effort to effectively provide support to learners and other systems. They mentioned that they encouraged them through internal and external workshops (e.g about motivation, inclusive education, screening, literacy, differentiated teaching); they assisted teachers through the establishment of school based support programmes/projects (e.g SIT, SMASSE, Circles of Support, mentoring and parenting); through collaboration with external personnel knowledgeable in the area such as social workers, guidance officers, people from the Division of Special Education); the SMT appreciated efforts of those teachers who showed initiative and commitment in providing support; the team also participated in identification and referral issues; encouraged team work among teachers; provided social and emotional support to teachers so as to assist them to come through challenging situations; encouraged collaboration and benchmarking with other schools in the cluster; valued and appreciated teachers' views during discussions; had participated in the teaching and learning process of learners experiencing barriers (through remedial teaching); practical participation in support groups (being members of SIT, preparation and implementation of IEP); tried to request for teacher aides; made an effort for teachers to have access to computers and the internet for the purposes of researching; and lastly, SMTs had introduced rewards to learners who perform better in specific skills.

10. Additional influential factors on teachers' performance in provision of effective support

10a & b. In addition to teachers' knowledge and skills – what other factors positively or negatively influence teachers' efforts in the provision of effective support in inclusive classes and schools? Provide motivation for your answer (see Table 17).

Table 17: Influential factors towards teacher performance in the field

Influential factors	Influence (positive/negative)	Motivation
Staff development activities	Positive	Teachers acquire more knowledge and skills and get to provide better support.
Support from SMT	Positive	Encourages teachers to put more effort and continue providing support.
Accountability to results	Positive	Puts pressure on teachers to provide support to learners so that they acquire better results.
Availability of support programmes/projects	Positive	Both teachers and learners are assisted through the support programmes/projects and this may result in improved performance.
Availability of resources (booklets, internet, teaching aids)	Positive	Booklets and internet serve as a point of reference for teachers, this leads to increased knowledge on inclusive education. Teaching aids have a positive influence in that teachers use those to help learners understand better the presented material.
Team work & social gatherings	Positive	Team work and social gatherings allow the sharing of useful ideas with regard to effective provision of support to learners.
Teachers' enthusiasm	Positive	Allows teachers to always think positive about assisting learners experiencing barriers (allows them the opportunity to plan for diverse needs presented by learners).
Teacher unions	Positive	Mould teachers to become more responsible in their work.
Lack of support from MoE & the Division of Special Education	Negative	Demotivates teachers who initially had shown motivation and commitment in supporting learners; teachers may fail to see the importance of inclusive education; teachers may lack direction and guidance to effectively implement inclusive education.
Lack of resources and financial assistance	Negative	Demoralises teachers; leads to poor performance by learners since they do not have access to support due to lack of the necessary equipment.
Lack of monitoring and evaluation teams on the implementation of inclusive education	Negative	Lack of comprehensive recommendations to guide teachers. Teachers' needs not identified for the purpose of further development.
Packed activities in the school (committees, heavy loads, clubs)	Negative	Teachers lack time to plan and implement support activities and programmes.
Loaded and examination oriented curriculum	Negative	Teachers rush through to finish the curriculum . there is no room for adaptation and modification of content in order to cater for diverse needs. Examinations do not cater for individual needs . all learners sit the same exam making it very difficult for others to succeed despite the support provided, this de-motivates teachers.
School expected target	Negative	The expectation that teachers should produce good results makes them to concentrate only on learners who are able to pass with little support (middle, high) and neglect those learners who are struggling.
Delay in assessment	Negative	Support/intervention is not prompt . learner's condition worsens.
Large class sizes	Negative	Teachers find it difficult to attend to individual learner's needs.
Inflexible curriculum	Negative	Learner's needs are not accommodated, this leads to low pass rate and teachers are discouraged to keep offering assistance.
Teachers' lack of interest and commitment	Negative	Teachers neglect learners in need of support who are in their classes . never engage in any form of support strategy.

School community lack knowledge on inclusive education	Negative	Teachers do not get assistance from colleagues and the entire school community.
Culture influence	Negative	At times teachers are not able to provide support due to cultural differences
Teachers lack patience	Negative	Teachers write off learners too early . see them as failures within a short time and stop providing support.
Poor remuneration	Negative	Teachers not motivated to work extra mile (e.g. to assist learners after school) if they are not recognized.
Teachers' mindset	Negative	Teachers have low expectations of learners experiencing barriers and this makes them not to care and provide support when the learners perform poorly.
Poor assessment procedures	Negative	Jeopardise appropriate support
Environment not conducive for learning (classrooms, hostels, staff houses)	Negative	Affect the entire school welfare and morale.
Lack of parental support	Negative	Learners progress regresses during school holidays since parents do not have accountability on their children's learning. Teachers sometimes lack information about the learner that they can use to plan for better intervention.
Poor attendance	Negative	Interferes with intervention schedule.
Students' indiscipline	Negative	Too much time is spent on addressing indiscipline in school and only little time is available for planning and providing support
Geographical location (remote area)	Negative	Very difficult to access both human and material resources.
Attitude of teachers	Negative	Teachers do not appreciate having learners experiencing barriers in their classes . they do not provide support to them. The negative attitude also makes teachers label learners as failures and this stops them from supporting them.
Unions	Negative	Have sometimes led to compromised working relations between teachers and their supervisors. no cooperation and collaborative effort towards learning and development of learners.

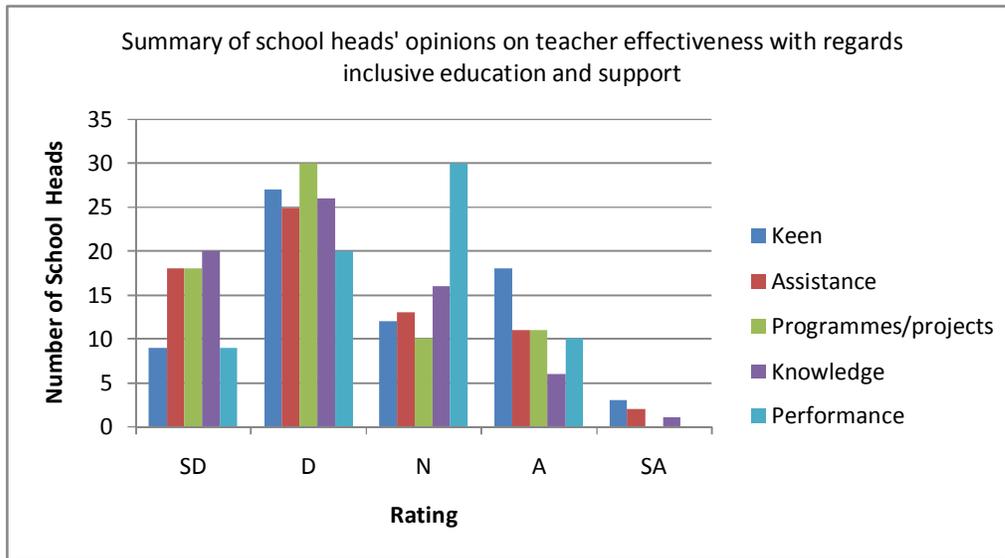
From Table 17 it is clear that school heads, just like teachers, confirmed that it is not only the initial training programme that currently determines teachers' effectiveness to provide support to learners and systems within inclusive classes and schools. The school heads were of the view that in the field, there are factors that positively or negatively affect teachers' effort to provide effective support within the inclusive education system. The researcher has a feeling that it is good that schools heads, through this study, have learnt about both enabling and disabling factors towards effective provision of support by teachers within the inclusive education system. This may motivate school heads to try and eliminate the negative factors while maintaining and strengthening the positive ones, hence effective implementation of inclusive education and provision of support.

11. RECOMMENDATIONS

11a. What are your recommendations regarding improvement of inclusive teacher training and support in the two teacher training colleges?

- The programme should be better aligned to inclusive education . trainees will gain more knowledge and skills on inclusive education;
- inclusive education and support should form the basis for the programme;
- training should be inclusive to enable trainees the chance to copy appropriate strategies and then model those in the field;
- trainees should undergo in-depth training (in a fully fledged programme) . this will build on teachersqcompetence and confidence;
- the programme should enable holistic development of trainees;
- trainees should have the opportunity to specialise;
- trainees should be exposed to more practical work and situations . this will enable them to acquire relevant practical skills and be more prepared to address varied situations and provide effective support to learners;
- training institutions should form working partnerships with schools where services are needed and provided;
- trainees should undergo an internship . this will enable them to experience and practice what they had learnt at institutions and also continue learning more information on the field. Internship reports will update trainers on strengths and weaknesses of trainees and will then be in a better position to assist trainees;
- the programme should be examined;
- institutions should at some point organise support programmes for teachers (graduates should go to institutions to receive support);
- admissions requirements need review so that the right people are admitted into the entire teacher training programme;
- institutions should carry out action research and advise the relevant authorities on the needed training facilities and resources and
- institutions should make a follow-up on their graduates to monitor and evaluate their progress.

Bar Chart 7:



To summarize school heads' responses, one may confidently assert that to a much greater extent, the responses reflect negative sentiments (refer to Bar Chart 7). This may probably imply that the current teacher training programme is not adequately preparing teachers to effectively provide support within the inclusive education system. It has to be acknowledged, however, that there are incidences where school heads thought teachers performed well with regard to the provision of support. This possibly may be due to the effect of the special education programme that teachers were exposed to during pre-service training.

5.4 RESPONSES FROM INTERVIEWS

Data for interviews was provided by four teacher trainers (two from each college) and six knowledgeable persons in the area of inclusive education and support. There were two interview instruments . one for each category. Like with the questionnaires, data from each category was treated separately; the interviews with teacher trainers are presented first and lastly, the interviews with knowledgeable persons are presented, analysed and discussed.

5.4.1 INTERVIEW WITH TEACHER TRAINERS . SEMI-STRUCTURED (ADDENDUM I)

The interview schedule for teacher trainers is made up of various sections, namely, a section on: trainers' competence and confidence in relation to training teachers for inclusive education; demonstration of inclusive practices and behaviours, challenges faced in training teachers for inclusive education, the implementation of the acquired knowledge and skills, and the general feeling and specific recommendations about the programme. During presentation, analysis and discussion processes, the same numbering system as in the interview schedule is used.

1. Trainers' competence and confidence in relation to training teachers for inclusive education

1a. Do you feel confident and competent to train inclusive teachers?

The respondents indicated that they were not adequately competent and confident to train teachers to effectively provide support within the inclusive system of education. Contributory factors were identified to this effect, and are as follows: (a) the area of inclusive education represents a fairly new paradigm shift from mainstreaming, so they had very little information of the field and they only relied on literature; (b) they were not adequately prepared for inclusive education and related issues during training. The majority studied LDs. One participant succinctly stated that "The MEd training did not adequately prepare me for inclusive education and support. The course currently offered touches on almost all categories of special needs, but for MEd training I focused on one area which is LD so it is really a great challenge to teach and talk about other areas and how you can include learners with such challenges". Their problem is exacerbated by lack of training facilities and resources.

1b. Are you aware of the shift in focus of support?

The results showed that teacher trainers had some information that within inclusive system of education the focus of support is not only on the learner but on the learner and all related systems (from the medical to the social model). They tried to familiarise trainees with this kind of shift through activities that include observing and assessing for inclusive teaching in school environments (OAITSE) and observation of student, history, environment, education and performance characteristics (SHEEP). These assignments are performed by trainees during teaching practice (TP), but trainers were not happy because due to limited number of human

resources and the fact they were not able to arrange follow-ups and to continue to guide trainees on the same activities during TP.

1c. Are you able to demonstrate the appropriate model during training?

It was found from the study that teacher trainers demonstrated the appropriate model only to a certain extent.

They highlighted that they did not have much knowledge on this aspect except for the limited information they read from books. The problem of lack of resources also hindered trainers' performance in this area. In most cases it is a problem because of lack of resources especially for demonstration purposes, one participant reiterated.

1d. Do you have adequate knowledge and skills on inclusive education and support?

The interviewees stated that they did not have adequate knowledge and skills in the area. This made them to not adequately prepare trainees in other topics or areas, for instance, the development and implementation of IEP, use of assistive technology, intensity of support and various inclusive practices and techniques. I understand that it is important to consider intensity of support, but does not have enough information to share with the trainees on severity of need, type and available support, stated one teacher trainer.

2. Demonstration of inclusive practices and behaviours by teacher trainers

2a. Do you demonstrate inclusive practices and behaviours during lessons?

According to the data gathered, teacher trainers demonstrated inclusive practices and behaviours. However, they confirmed that they were not competent in this area and were only able to demonstrate those to some extent. In fact one teacher trainer answered by saying *Yes, but not 100% confident, I am aware of them and demonstrate to some extent as much as possible.*

One mentioned that trainees are exposed to inclusive practices and behaviours through the available video cassettes on inclusive education.

2b. How do you positively influence teacher trainees' attitudes towards inclusive education and support?

The participants responded to this question by stating that it was not easy for them to help trainees to develop the right attitude towards inclusive education and support. The researcher quoted one participant who stated that it is difficult, but trainees are normally encouraged to show positive attitude by giving individual attention to their children more so that in junior schools they don't normally find extreme cases. The only problem is the negative attitude in schools. Teachers there do not find it important to support learners with special needs. However, trainees have reported that they interact well with the learners during TP when they do their assignment.

One reason for this difficulty lies with the programme structure which allows no or minimal interaction between teacher trainees and learners experiencing barriers to learning and development, and does not expose trainees to practical work. Trainers were only able to provide verbal encouragement to trainees, so that they should have positive attitudes to function effectively in inclusive classes and schools.

2c. What strategies and techniques do you use, that you think trainees should adopt and employ for effective support?

A few strategies were mentioned. The strategies included the use of activities that encourage interaction, use of videos, and resource persons from outside. It was also established through this question that lecturers mostly used lecturing but they would appreciate it if they could get support from authorities to visit schools with their trainees to observe and practice using appropriate strategies.

2d. Do you think you are able to use the appropriate terminology in everyday teaching?

Through reading literature on inclusive education and support, trainers have learnt that it is important to use appropriate terminology in order to realise appropriate and effective support within inclusive education. This has made them to be careful about the terminology they used during lessons and open discussions with trainees . and thus they tried to use the current terminology.

3. Challenges faced in training teachers for inclusive education and support

- The current programme is not fully aligned to inclusive education;
- the current programme does not seem to be merged with the schools and community needs where the graduates serve;

- lack of training facilities and resources;
- lack of support from senior management ;
- negative attitudes (of trainees and other staff members);
- lack of college policy on inclusiveness;
- the colleges mission and vision statements are silent on issues of inclusive education and support . anything to do with learners experiencing barriers is only perceived as the responsibility of the Special Education Department;
- support from the Division of Special Education is minimal;
- the programme is not examined . trainees think of it as not an important programme;
- trainers are not competent and confident in the area and
- lack of support programmes for staff development

4. Programme status

4a. Does the programme fully expose trainees to knowledge and skills relevant for inclusive education?

It was learnt from the results that the current programme does not fully expose trainees to knowledge and skills relevant for inclusive education. The participants were of the view that trainees are able to acquire some basic knowledge on inclusive education but lack the necessary skills. The explanation hereof was that the current programme puts more emphasis on special education as compared to inclusive education . leading to more focus on the medical model than the social model. In fact, they were of the opinion that the current programme has been overtaken by events and therefore needs review and restructuring. They also mentioned that trainees have no or limited practical experiences and this makes it difficult for them to acquire the necessary practical skills for inclusive education. It was stated that ~~Mostly~~ it is lecturing, especially that trainees do not get any support to visit schools and do practical or even to observe in schools or places where there are such learners.

Moreover, training institutions are not adequately resourced so that trainees can perform hands-on activities . like learning how to handle and operate assistive technology (for example, Braille and hearing aids) and as a result trainees graduate

without having acquired the relevant knowledge and skills necessary for effective provision of support within the inclusive system of education.

4b. The programme is offered for awareness and is broad-based; what is your feeling about this?

The participants were happy about the fact that the programme is broad-based. They thought this helps trainees to learn and cover as many areas as possible and as such they will be better placed to address as many issues as possible while in the field. Trainers are however aware that a broad-based programme has some challenges especially when there are limited human and material resources. The results also showed that trainers preferred a fully fledged programme that would enable trainees to fully acquire the necessary knowledge and skills relevant for inclusive education and support. They, however, appreciated that the awareness programme to some extent equips trainees with basic knowledge and skills that one can use valuably.

5. Implementation of the acquired knowledge and skills

5a. Have you learnt of or observed trainees and graduates implementing the acquired knowledge and skills?

It was established from the study that trainees (during TP) and graduates rarely made use of the knowledge and skills learnt during training. The respondents observed that the focus was mainly on teaching subjects and not on providing support to learners experiencing barriers in learning those subjects. The trainers were concerned that the trainees and graduates still used the traditional forms of assessment that were not designed to meet the needs of individual learners (IEP), but for the whole class. This is evidenced by one trainer's comment that "the assessment procedures employed involve oral and written exercises. They do not vary those according to learners' needs". Trainers also made an observation that trainees and graduates seemed to know their learners as capable and incapable, not necessarily identifying the area of need so as to provide appropriate support. The other conclusion made by trainers was that the learning resources developed were for the purposes of whole class teaching, not necessarily for supporting those learners in need of assistance. Initiation of support programmes and projects for

teachers and learners was also observed to be lagging behind. trainees and graduates seemed not to be involved in the initiation of support programmes and projects. Trainers have however learnt that some join the existing SITs and any other programmes and projects.

Reasons attached to no or minimal implementation were linked to trainees and graduates lack of practical skills; large class sizes; negative attitudes from the implementers, learners and colleagues and lack of monitoring from the Division of Special Education. They were of the opinion that the Division should move around to establish schools progress towards the formation and implementation of SITs and demand an explanation if they do not exist or are not functional and offer support to such schools.

The participants appreciated the fact that trainees and graduates met with parents (though limited) during Parents Teachers Association (PTA) meetings, report collection where they discussed the child's needs and progress. It was also found that some of the trainees and graduates followed learners home in case they stayed away from school, and if possible, provided support.

6. General summary and specific recommendations about the programme

The general sense was that the programme currently exposes trainees to limited knowledge and skills relevant and necessary for inclusive education. The main reason for limited knowledge and skills on inclusive education is that in the programme, issues of inclusive education and support are not addressed prominently. The recommendation was that the concept of inclusive education and support should be included as a major component and be studied intensively by all trainees. Other complementary reasons are that the one hour per week that is currently allocated for the programme, is not adequate. This makes both trainees and trainers to cover limited components and therefore result in limited knowledge and skills. The recommendation is that the programme should be allocated more time. Furthermore, the programme is currently not examined like others at the institutions. Trainers felt that this arrangement encourages a negative attitude on trainees who feel that it is only a waste of time to undergo such a programme. It was communicated during interviews that some trainees deliberately miss lectures due to

this arrangement and other trainers negatively influence trainees by mentioning to them that the programme is not important and not examined. On the other hand, trainers are aware that there are various forms of assessment that are even better than examinations. They however recommended examinations.

The other discovery made during these interviews that resulted in limited knowledge and skills, was that there were no adequate and appropriate training facilities and resources in the training institutions. On this issue, they recommended that there is a need to build and equip resource rooms and also to increase the number of personnel. They also felt that they need continued staff development programmes because currently they are less confident and competent on issues of inclusive education and support. The other recommendation was that trainees should have exposure through school visits and trips in order for them to experience and model the support strategies they come across. Collaboration with the existing special schools was also recommended . as special schools are better placed in terms of both material and human resources.

Moreover, it was established that trainers prefer a broad based (in-depth) programme at some stage followed by specialisation. They thought this could improve trainees attitudes as one would concentrate on his/her area of interest at specialisation level. In addition, the participants felt that at present there seemed to be no relationship between the programme and others in the institutions. To minimise this gap, it was recommended that there should be infusion of some inclusive education models in other teaching subjects (especially the concept of classroom management) so that trainees learn how to accommodate learners within their subject specialisation. One interviewee was quoted saying %his will even make more people to realise that special education is for all. If a learner has visual impairment for example, he/she is affected across the curriculum and therefore should be supported across+. It was suggested that there could be a special or inclusive education programme where trainees do in-depth learning and training.

In general, teacher trainers recommended that the programme should be reviewed and restructured in order to align it with inclusive education, support and inclusive teacher training.

In conclusion, teacher trainers were of the view that the current programme is to a large extent not adequately preparing teachers to effectively provide support within the inclusive education system. They revealed that the programme itself is not aligned to inclusive education and support and therefore it is difficult for trainers to implement it with the aim to produce teachers for inclusive education. One interviewee said %o donq think it is aligned to that point . it is more aligned to mainstreaming, integration than inclusive education. If it was aligned, even the schools where inclusive education is going to be practiced will be aligned. Currently the course is aligned to the medical than the social model. Still disseminating information about special education. This leads to trainees graduating without most of the relevant and necessary knowledge and skills to effectively function in inclusive settings+. For instance, they had observed that graduates did not adequately implement what they acquired during training and they linked this to numerous factors including a lack of knowledge and skills on inclusive education and support. Participants also identified other contributing factors to the failure of the programme. The factors emanate from within the trainees, trainers, the institutions and the nation at large.

On the other hand, trainers acknowledged the fact that all trainees were exposed to the training programme, which may probably lead to improved support to learners and systems in inclusive settings. Furthermore, they appreciated that the programme was offered on broad-based mode, which they thought was in line with inclusive education; however they felt broad-based training can be complemented by specialisation at some stage of the training.

5.4.2 INTERVIEW WITH KNOWLEDGEABLE PERSONS . SEMI-STRUCTURED (ADDENDUM J)

There were six knowledgeable persons who participated in this research. Four participants were from Botswana (one from Zimbabwe but currently employed in Botswana) while the other two were from South Africa and Lesotho. The latter person recently moved to Ireland and the fact that the participants provided information which is thought to be applicable to Southern Africa the researcher did not see any good reason to present, analyse and discuss information according to where they came from. The interview schedules have sections on evaluation of the

current special education programme, components to fully prepare teachers for inclusive education, status of the special education programme for training teachers for inclusive education, challenges faced in training teachers for inclusive education and support, strategies to address the challenges, challenges likely to be faced by teachers at schools in providing effective support, possible strategies and general recommendations towards a better training programme. The same numbering system from the interview schedule is accorded to the sections during the presentation, analysis and discussions of the research findings.

1. Evaluation of the current special education programme

1a. Can the programme allow trainees to learn and acquire knowledge and skills appropriate for teachers to effectively provide support in an inclusive learning environment?

The interviewees had slightly different views. Some had the opinion that the programme will in no way equip trainees with knowledge and skills appropriate for inclusive education. They argued that the programme is not about inclusive education . rather it is still focussing on the previous paradigm which views the child as the problem. Furthermore, the programme focuses on specific disabilities, leaving aside many other systems surrounding the learner that are directly and/or indirectly influencing the whole process of learning and development. In fact, one interviewee succinctly commented that %he course will give trainees awareness from the integration perspective . it was okay some years back, now it can no longer serve the times we are living in especially in the advent of inclusive education.+Moreover, the interviewees observed that the current programme comprises mostly of theory, and therefore it will not allow trainees to acquire practical skills necessary for inclusive education. In addition, it was observed that the terminology used is not aligned to inclusive education and support (examples included ~~disability~~ ~~mainstreaming~~ ~~special educational needs~~ and ~~mixed ability teaching~~). On the other hand, some interviewees acknowledged and appreciated that the programme is not totally ~~useless~~ they felt that through this programme, trainees may learn some knowledge and some basic skills required for handling learners experiencing barriers to learning and development. It is worth mentioning that they strongly felt that without practical exposure, the teachers will not function effectively in inclusive settings.

It is on this ground that the researcher concluded that the results show that the programme is somewhat outdated and will therefore not effectively equip trainees with knowledge and skills necessary for inclusive education.

1b. Can it instil a positive attitude in teacher trainees with regard to provision of support in inclusive classes and schools?

Interviewees were of the view that through this programme, it will be very difficult for trainees to develop positive attitudes in relation to provision of support within inclusive settings. This is because the current teacher training emphasises the medical model of disability where the deficit lies with the learner and therefore needs fixing. This medical model will instead strengthen the stereotypical belief the trainees already have from their communities where provision of services to those with challenges is not highly recommended. Furthermore, teacher trainees may find it difficult to appreciate diversity. According to one interviewee, the trainees may have the knowledge. My concern is whether the trainees have the opportunity to work with learners with disabilities, are they placed in schools where there are learners with disabilities? Is it a component that is assessed during TP? It is not the knowledge that is important, the skill is important but very difficult to acquire and with this programme there is no guarantee that they will acquire the skills and appropriate attitude for inclusive education due to lack of exposure. The other participant also stated that the fact that the course still emphasis the medical model, it will be difficult for trainees to develop positive attitude towards the provision of support in inclusive classes and schools.

The results therefore show that the programme will not adequately help trainees to develop better attitudes in relation to provision of support in inclusive settings.

1c. Against the background that it is not examined, does it have the capability to motivate trainees to study and learn it?

One interviewee felt that there is nothing wrong if the course is not examined. He argued that there is nothing wrong if the course is not examined. It just depends on lecturers' creativity to set and develop forms of assessment, for instance lecturers can use portfolios at some point. Lecturers should exercise creativity so that trainees do not think less of the course. He thought portfolios will do better as a form of assessment. On the other hand, the majority of the participants were of the view

that without examinations, like in other subjects studied in colleges, and contributing to the acquisition of the DSE, trainees would not be motivated to study and learn the subject. They felt that both trainees and trainers are likely not to put in much effort towards something that is not examined; trainees may feel like they are wasting their time while trainers do not prepare thoroughly for lectures.

The conclusion drawn is that it is necessary for the programme to be examined. The researcher however appreciates the argument that it is not only examinations that motivate the trainees to study and learn. It is felt that the current arrangement may dictate examinations as a move towards the betterment of the course. From experience as a special education lecturer, the researcher has learnt that trainees take the programme lightly because it is not examined like others.

1d. Can it influence effective implementation of inclusive education and support?

Interviewees were of the opinion that trainees are exposed to the medical model of teacher training and also they have no or little exposure to practical skills. Due to these reasons they did not see any possibility of the programme influencing effective implementation of inclusive education and support. In fact, one interviewee stated that the programme does not show development from special to inclusive education . from the medical to the social or rights model. This signifies unlikeness of influence on effective implementation+. On the other hand there was one who thought that it can influence effective implementation but only to some extent, this interviewee noted that the programme can influence effective implementation of inclusive education and support to some extent. The trainees may utilize their awareness to support learners with diverse needs in inclusive classes. With their awareness in the area of special education, graduates may assist those who did not have the opportunity to study special education+. However, this participant mentioned that it would only be possible if the graduates have the right attitude. The reader is referred to 1b where the results showed that the programme will not contribute to instilling a positive attitude in teacher trainees.

The conclusion reached is that the current programme will not positively influence effective implementation of inclusive education and support.

2. Components to fully prepare teachers for inclusive education

2a. What courses/modules should be included in the programme?

One interviewee felt it was difficult to suggest those, but thought it will only be appropriate if competencies trainees must graduate with are determined by the relevant authorities and are in line with the need of the communities at that particular time. Some were of the opinion that the current courses or modules are fine but should be improved with those that will address inclusive education and support. The suggested courses or modules included:

- Action research;
- communication and collaboration;
- teacher behaviour towards inclusive education and support;
- handling diversity;
- change management (teacher as facilitator of change);
- HIV and AIDS;
- assistive technology and
- community involvement

The results show that there is need for updating the courses or modules in the current programme.

2b. Which model of support should be emphasised?

The interviewees preferred the social as compared to the medical model because the participants felt that: (a) there is nothing or little that can be done to change the learner but there is a lot that can be done to change the environment in order to accommodate and support the learner; (b) a child can only learn and develop if he/she and the surroundings are taken into consideration; (c) a learner is part of the society; and (d) the medical model stops professionals from planning intervention strategies that will effectively assist the child to learn and develop.

The results show that the social model is highly appreciated within the inclusive system of education and therefore trainees should be exposed to such during training.

2c. What knowledge and skills should the programme instil in teacher trainees?

- Reflective skills;
- collaboration and communication skills;
- situation analysis skills;
- counselling skills;
- establishing school support teams;
- developing learning support programmes;
- identification and referral and
- inclusive teaching

It is evident that it is necessary for teachers to acquire various relevant knowledge and skills in order for them to function effectively within the inclusive system of education.

2d. What behaviours should the programme instil in teacher trainees?

- Trainees should learn to appreciate learner differences;
- trainees should learn to be sensitive;
- trainees should learn to respect learners;
- trainees should learn to be responsible;
- trainees should have high or positive expectations of their learners;
- trainees should have the readiness to adapt to learners needs and
- trainees should develop a positive attitude towards learners.

3. Status of the special education programme for training teachers for inclusive education

3a. Should the programme be infused or taught separately?

The interviewees had different views regarding this arrangement. There were those who were for the idea of infusion as compared to a separate programme. Those who preferred the latter stated that infusion is not that easy because the how part of it may pose problems. Furthermore, one of the interviewees felt that infusion is not reliable hence it might jeopardise the quality of the programme. The researcher is of the opinion that any problem in the structure of the training programme will in turn affect the intended results, hence it is of utmost importance to critically analyse strategies and processes before implementing them. The other group preferred infusion with the belief that it will encourage and show trainees that there is a

relationship between subjects and therefore they would not have an idea that a learner experiencing barriers to learning is the responsibility of a special department or special education specialist. One of the participants thought infusion could be made possible if lecturers were to request syllabi from junior secondary schools and do case studies during training. Moreover, lecturers can incorporate special or inclusive education by demonstrating to trainees how to remediate through microteaching and role playing. It was strongly felt that the training itself should be inclusive so that trainees experience inclusiveness and therefore graduate with the inclusive education concept and as such be able to practise.

3b. Should the programme be broad-based, specialised or both?

Data collected indicates that all interviewees preferred the programme to be broad-based initially and be followed by some sort of specialisation. The element of exposing trainees to all areas (broad-based) will, according to the interviewees, enable trainees to provide effective support to all learners with diverse needs within the inclusive system of education. The other reason for offering a broad-based programme at secondary colleges of education as stipulated during the interview is that the graduates are not special but regular teachers, and like, it was stated earlier, they have the responsibility to provide support to many different learners with diverse needs. The recommendation made was that the broad-based programme should focus more on case studies, more like problem-based learning. The case studies will expose trainees to different scenarios that graduates are likely to face in the field and therefore they will be in a better position to handle the same during their teaching. On the other hand, specialisation allows one to study a concept or course in depth, hence acquisition of more knowledge and increased competence. It was also mentioned that specialisation may help trainees to develop positive attitudes towards the programme, especially those who wish to study the programme at a higher level.

There were two different scenarios that were presented regarding broad-based plus specialisation training. The first suggestion was that there should be two levels in the programme. During level 1, trainees should be exposed to all the areas, and in level 2 trainees should all study LDs as a generic course and specialise in either visual or hearing impairment. One interviewee was of the feeling that LDs are of high

incidence in Botswana so there is need for teachers to know more on the area. The second suggestion was that trainees should specialise in their third year and focus on specific issues of inclusive education, where they learn about collaboration; support teams; adoption and adaptation of materials; action research; situation analysis and development of learning support programmes.

3d. Should the programme be compulsory or optional?

Interviewees agreed that the programme should be compulsory to all teacher trainees. The argument given was that all graduates are going to operate in classes consisting of learners with diverse needs and should therefore be in a position to support diversity.

3e. Should the programme be taught by specialists in inclusive education?

The general consensus was that education is dynamic and therefore it is not necessary that teacher trainers should have specialised in inclusive education and support. The interviewees were of the feeling that the current teacher trainers (mostly trained in LDs) are still in a better position to produce teachers for inclusive education provided they are willing to change and they have the right attitude with regard to inclusive education. Moreover, interviewees were agreeable that teacher trainers should be engaged in continued professional development in inclusive education and support in order to keep themselves abreast with the latest information in the area. In addition, interviewees emphasised the importance of collaboration between the special education college lecturers and those from other institutions who are knowledgeable in the area and also have some reference materials.

3f. At what level should the course be studied?

The data gathered clearly shows that studying special education as an awareness programme is not given first priority by all the participants. They strongly advocate for an intensive or fully fledged programme. The feeling expressed by one interviewee was that ~~we~~ we have to appreciate that the awareness course is to some extent equipping trainees with some knowledge and skills, but it is very important that the programme is intensive/fully fledged to enable trainees to fully acquire the

necessary knowledge and skills relevant for inclusive education and support. By so doing, the colleges will produce competent and confident teachers.

3g. How should the college programme relate to schools and the community?

The interviewees were of the view that when designing a curriculum for teacher trainees, it is very important to consider the needs of the community. One interviewee stated that any curriculum of teacher training should allow trainees to learn and get into the community . through community projects and *kgotla* meetings for instance, where the services of the graduates are needed. Moreover, it was mentioned that if the community needs are not considered, clients will continue to be excluded from the education system. In fact, the participants stated that inclusive education emphasises three layers, namely micro-, exo- and macro-systems.

4. Challenges faced in effective training of teachers for inclusive education

4a. What challenges are likely to be faced at institutional and national levels?

Table 18: Challenges faced in effective inclusive teacher training

Challenges at institutional level	Challenges at national level
Negative attitude of trainees	Absence or unclear policy on inclusive education
No or limited number of trained personnel has been exposed to the relevant training	Political will
Teacher centred methodologies	No financial commitment for training teachers for inclusive education
Inadequate training facilities	Some authorities still have mixed attitude towards inclusive education
Teacher training curriculum not aligned to inclusive education	No or minimal collaboration between departments and stakeholders
Policies not guiding enough on the competencies expected of teachers when they graduate	Communities lack knowledge on inclusive education
Lack of collaboration between training institutions and related bodies	

Table 18 indicates that there are challenges at both institutional and national level which impact on effective training of teachers for inclusive education. This may probably imply that in as far as countries and states structure training programmes they also need to identify and address the possible stumbling blocks towards effective implementation of the programme.

5. Strategies to be put in place to minimise the challenges

5a. Strategies at institutional level

The data gathered shows that it is of utmost importance that both trainees and trainers have a positive attitude towards inclusive education and support. This can be achieved if both parties engage in extensive reading, carry out research and case studies in the field. Continued professional development for lecturers was also thought to be of help to trainers to develop a positive attitude as they will not be discouraged or intimidated by a lack of appropriate knowledge and skills. One way of ensuring continued professional development is through the establishment of support networks for professional development by institutions. Secondly, there is need for collaboration . especially if trainers have not been exposed to the relevant training. Collaboration should exist between training institutions, schools and communities, between training institutions and special education staff at the Division of Special Education and between training institutions and knowledgeable persons in trying to develop and implement an inclusive culture. Thirdly, interviewees felt there is a need to change the teacher training model so that trainees are exposed as far as possible to practical activities, trainees have the opportunity to learn and acquire various instructional accommodations and are able to implement those when they get to the field. Fourthly, training institutions themselves should be inclusive in terms of infrastructure, resources, policy, statements (mission and vision) and practices. The fifth strategy identified was that there should be clear training guidelines . through which expected competencies are outlined. The sixth strategy mentioned was that the institutions's senior management should be supportive by showing a positive attitude towards inclusion as well as selling the college mission and vision on inclusive education. The participants also thought the presence of persons or trainers with disabilities in training institutions is also a wise strategy in that they will be viewed by trainees as role models and might motivate them to study the programme with passion, hence develop the appropriate attitude towards inclusive education. Lastly, the interviewees recommended that the institutions should follow up graduates to examine their performance; this will be very helpful in the regular review of the curriculum which is a further strategy that was mentioned.

5b. Strategies at national level

Interviewees thought developing a clear inclusive policy is a crucial strategy towards better preparation of teachers for inclusive education . policy makers should aim to change their attitude in order to realise this. It was mentioned that following the development of the policy, the relevant departments and divisions should spearhead the implementation process by cascading information and monitoring departments and sections on the implementation progress. Furthermore, the policy should be regularly reviewed in order to accommodate the current demands of the education system. The other strategy that can be employed at national level to ensure effective inclusive teacher training is to establish support networks for training institutions in terms of human and material resources. In addition, the interviewees felt it would also be beneficial if the college principals were to be trained in the field of inclusive education and support. This would enable them to make fruitful contributions and decisions regarding inclusive teacher training. Collaboration was also identified as a strategy that could be used at national level that would contribute positively towards inclusive teacher training. They were of the view that collaboration should exist between ministries, organisations, schools, communities and all related stakeholders.

6. Challenges likely to be faced by teachers at schools in providing effective support

6a. What challenges may hinder graduates to provide effective support in schools?

- Teachers not having the right attitude towards inclusive education;
- teachers lacking the relevant knowledge and skills on inclusive education;
- lack of a reading culture among teachers . leading to limited information;
- no self-motivation;
- lack of resources;
- no commitment from the school management team towards inclusion;
- communities lacking information on inclusive education;
- unavailability of the inclusive education policy;
- infrastructural barriers;
- lack of collaboration between teachers and teachers, teachers and specialist teachers around, departments and stakeholders;

- high teacher-student ratio;
- special schools still operating as schools for special children;
- no support programmes and mechanisms for both teachers and learners;
- working environment not conducive;
- no incentives;
- the government is silent on inclusive education and support services;
- resistance to change;
- strenuous load;
- inflexible curriculum;
- lack of support from relevant ministries, departments and divisions and
- lack of parental involvement

7. Possible strategies

7a. What strategies may be employed to ensure effective teachers' performance?

The data collected indicate that most of the strategies suggested in (5) will also be applicable in addressing challenges in schools in order to realise effective performance by teachers with regard to the provision of support. The strategies include: a positive attitude towards inclusive education; intensive reading and life-long learning; establishing support networks; developing clear inclusive policy(ies); inter-sectoral collaboration; acquisition of facilities and resources; information campaign and continued professional development. In addition, the participants recommended that members of the school community should accept and take part in the process of change; there should be establishment of support teams in schools; improvement on teachers' working conditions; reduced teacher-learner ratio; improved school-community work relations; parental involvement in the learning processes; monitoring and evaluation of inclusive practices and support services by relevant ministries and departments; establishment of reference schools; use of special schools as resource centres; involvement of teacher aides and sign language interpreters; establishment of a strategy for use of IEP and monitoring of pupils' progress; establishment of a system of placement for learners with a suitable criteria; the Ministry of Education should have the responsibility to drive the implementation on inclusive education and should be involved in running implementation workshops,

engage in capacity building, have inventory of the needs of the schools and ways to address them and demonstrate various instructional accommodations.

8. General recommendations

8a. Please make general recommendations regarding the improvement of inclusive teacher training and support in training institutions

- The curriculum in training institutions should be inclusive . move away from the medical to the inclusive teacher training model;
- the current programme needs restructuring such that it is aligned with inclusive education and support;
- it is very important for training institutions and related stakeholders to define competencies that teacher trainees should acquire;
- institutions should engage in regular review of the curriculum;
- the programme should initially be broad-based to allow trainees to learn about many situations and conditions they are likely to face in the field, then followed by in-depth training and learning of inclusive education and support issues;
- the programme should be fully fledged, not an awareness programme as is currently the case;
- the programme should have exposure activities (interactive teacher training model) . trainees should go to schools to experience working with learners with diverse conditions, they should also undergo internship of some sort;
- there should be inter-sectoral collaboration;
- assessment procedures should be restructured . portfolios, examinations for example should be included;
- adequate and appropriate resources should be in place and
- all staff in training institutions should have some training in inclusive education so that they can infuse the elements of inclusive education in their day to day lecturing, and also to better their attitude.

To conclude, the responses from the knowledgeable persons informed the researcher that the current programme has both strong and weak points. Some of its

strong points are that the programme is compulsory to all, it is also broad-based and it may equip trainees with basic knowledge and skills that can be used in the provision of support, provided trainees are exposed to hands-on activities. On the other hand, the participants were of the view that the programme is still for special and not inclusive education. Evidence is signified by the emphasis on the medical model, use of inappropriate terminology, and the theory-based programme. The other concern, according to participants, is that the programme is only offered at an awareness level, which makes it very unlikely for trainees to learn and acquire a lot of knowledge and support skills. Recommendations were also made with regard to the development of a more appropriate programme for training teachers for inclusive education and support.

It was also learnt from the responses that there are challenges likely to be faced in trying to prepare teachers for inclusive education and support. It is important to note that some of the challenges that they identified were also highlighted by trainers from the two colleges. For any programme to be effective there has to be support strategies on the ground. Furthermore, teachers may undergo an effective programme, only to experience challenges in trying to effectively provide support to learners and systems while in the field. It is also important that the challenges are addressed, by teachers and other related stakeholders. This may probably imply that the programme should equip teachers with the necessary knowledge and skills to address challenges.

Generally, knowledgeable persons strongly felt that the programme will not adequately prepare teachers to effectively provide support within the inclusive education system. They are of the opinion that the programme is not aligned to the inclusive education system.

CONCLUSION

The data from the empirical investigation was analysed. Tables, bar charts and pie charts were used to present the captured information pertaining to the evaluation of the current special education programme on teacher effectiveness. For easier analysis and presentation of interview schedules, subheadings for investigated aspects were formulated and the findings were discussed and presented under each subheading.

Conclusions made from the research findings will be now presented in the next chapter. Furthermore, a suggested teacher training model will be presented.

CHAPTER 6

INTERPRETATION, SUMMARY OF FINDINGS, THE PROPOSED MODEL, LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

6.1 INTRODUCTION

This chapter considers and presents the summary of findings of the study. Findings were drawn from the results as established through the literature review and the empirical investigation. The summary aims to address the problem statement that suggested that the special education programme offered in secondary colleges of education may not be aligned with inclusive education and therefore it may not adequately equip trainees with knowledge and skills to effectively provide support in inclusive settings. Moreover, the findings were summarised in relation to the general aim and objectives as well as the research questions.

Like it was revealed in the previous chapters, data gathering for the empirical study included the use of questionnaires and interviews, where the first-mentioned focussed on teachers and school heads, and the latter on teacher trainers and knowledgeable persons in the area of inclusive education and support. The results from all the categories were combined in order to come to conclusions with regard to the present study.

6.2 PROCESSES OF ARRIVING AT A HIGHER LEVEL OF ANALYSIS AND INTEGRATED INTERPRETATION

For each group of participants a specific instrument was developed and administered. The instruments (questionnaires, interview schedules) consisted of common questions, from which categories or headings were worked out via the constant-comparative method of data analysis, for the purposes of making conclusions on the established results. Where a question from an instrument could not satisfactorily be assimilated into a specific heading, the researcher preferred to

address the findings of the question separately. Information from different participants and instruments (questionnaires and interviews) were integrated with the understanding that triangulation leads to improved and grounded results. Moreover, approaching a research problem from various angles leads to better understanding of the phenomenon (Kelly, 2006:287). In De Vos (2005:362) it is also stated that triangulation allows researchers to be more confident of their results, it leads to enriched explanation of the research problem, may result in bringing theories to bear on a common problem and may also serve as a critical test. Triangulation may take different forms that include data, investigator, theory and methodological triangulation. For the purposes of the current research, methodological triangulation was employed. This type involves the use of multiple methods to investigate a single topic (De Vos, 2005:362). Likewise, both qualitative and quantitative components of the mixed-method approach were used in the study to collect data on the appropriateness of the special education programme offered at MCE and TCE. The programme evaluation design was the meta-methodology followed when evaluating the current programme. Furthering methodological triangulation, the results, were as stated earlier, combined and will now be presented under several headings.

The headings or categories include: (a) type of learners currently supported in inclusive classes; (b) usefulness of the programme; (c) rating of teachers' performance; (d) knowledge and skills acquired and their adequacy; (e) teachers' keenness or attitude towards provision of support within inclusive settings; (f) implementation of the acquired knowledge and skills; (g) general status of the programme; (h) influential factors to teachers' performance, and (i) recommendations for a more effective programme (proposed model). The researcher did not draw any conclusions with regard the general information as it was deemed not to have a direct bearing on the outcome of this study. The questions that formed categories or headings are as reflected in Table 19.

Table 19: Questions matrix for integrated analysis

CATEGORIES	QUESTIONNAIRES		INTERVIEWS	
	Teachers	School heads	Teacher trainers	Knowledgeable persons
a.	6a, b	-	-	-
b.	7	7c	4a, b	1a
c.	6c, d	8e	-	-
d.	8, 9	8a	4, 6	1
e.	12	5, 6	2b	1b
f.	10, 12	6, 7	5	1d
g.	12	-	1, 2, 3, 4, 6	1, 2, 3, 4, 5
h.	11	9; 10	-	6, 7
i.	13	11	6	2, 3, 8

6.3 SUMMARY OF FINDINGS

6.3.1 TYPE OF LEARNERS CURRENTLY SUPPORTED IN INCLUSIVE CLASSES (A)

The conclusion made is that in Botswana schools, classes consist of learners with diverse needs. According to Guijarro (2000:40) diversity signifies the unique and specific educational needs of learners with regard their access to learning experiences which are part of the curriculum and are crucial for their social development. Teachers confirmed that they have learners with diverse needs by indicating in the questionnaire that they currently have and provide support to learners experiencing diverse barriers to learning. The presence of this kind of learners in ordinary/general schools/classes came about as a result of the RNPE of 1994, Vision 2016 and various other government documents which dealt with education and provision of support to learners experiencing barriers to learning and development (cf. 3). Furthermore, Botswana, just like many other countries and states around the world, is currently engaged in the move towards more inclusive schools, where learners experiencing barriers learn together and along with their fellow students who do not experience obvious barriers to learning. In fact, inclusive education advocates that all learners, including those that experience challenges should have equal educational opportunities regardless of the presence of any barrier. Furthermore, there is a need for these learners to attend the same schools attended by their peers and for them to receive maximum support (Sharma et al., 2006:80). If learners experiencing barriers to learning and development are included in ordinary schools, Booth (2000:32) believes a majority of learners will receive

effective education and also that the efficiency and cost-effectiveness of the education system will be realised. The conclusion reached by Mdikana et al. (2007:125) is that the inclusion of learners experiencing barriers to learning and development in ordinary schools is becoming more prevalent. In particular, the Botswana government is also a signatory to the UNESCO framework for action on Special Needs Education, which urges schools to accommodate all children regardless of their area of need (Savolainen & Alasuutari, 2000:11).

It therefore appears that in Botswana learners with diverse needs predominantly attend in ordinary settings. Guijarro (2000:48) asserts that if teachers are to meet and cater for diverse needs, they need to move away from the traditional paradigm where all children were considered the same, therefore studied the same concept, at the same time, in the same way and with the same materials. Gyimah et al. (2008:77) also assert that while it is crucial that teachers recognise learners' diverse needs, it is more important for teachers to possess the same goals for all the learners in order not to isolate and segregate any learner. This may probably necessitate the special education programme to be aligned with inclusive education in order for teachers to appropriately and effectively provide support within inclusive settings. In fact, Van Laarhoven et al. (2007:440) emphasized that aligning the special education teacher training programme with inclusive education has been widely recommended as a way to realise teacher preparedness for inclusive settings.

6.3.2 USEFULNESS OF THE PROGRAMME (B)

With regard to the usefulness of the current special education programme, the conclusion was reached that the programme was to some extent useful to trainees. Teachers who felt that the programme was useful had various reasons, and the commonest was that the programme was an eye-opener to them with regard to special and inclusive education. They confirmed that by the time they graduated, they already had basic knowledge and skills as well as a positive attitude that have so far proved to be useful in their efforts to provide support within inclusive classes. In fact, the importance of exposing teachers to special education at pre-service level cannot be afforded less attention. The researcher is of the view that if teachers have useful pre-service programmes, their level of preparedness will somehow be significant and as such, teachers will be able to function within an inclusive system of

education. Scholars such as Whitworth (undated) are also of the view that preparing teachers at the pre-service level to teach in inclusive settings is essential for effective implementation of inclusive education in inclusive, collaborative and diverse settings. In support to this argument, Sharma et al. (2006:81) succinctly state that exposing trainees to a special education programme at pre-service level is essential especially in addressing teachers' concerns and possibly modifying their negative attitudes about inclusive education as well as towards persons with disabilities. Evans (2000:37) also finds it significant to expose teachers to pre-service special and inclusive education so that teachers acquire and develop appropriate attitudes, skills and competencies.

It is important, however, to note that there were participants (teachers) who were of the view that the programme was not useful in preparing them to teach and provide support to learners in inclusive classrooms and schools. These participants submitted various reasons and the one which appeared most was that the programme was too theoretical; it never exposed them to any practical activities, demonstrations of inclusive practices and contact or interactions with learners experiencing barriers to learning and development. Scholars such as Golder et al. (2005:93) also established that teachers believed that they needed more practical experience and practical knowledge about inclusive education for them to be able to effectively cater for diverse needs within inclusive classrooms.

The knowledgeable persons, when evaluating the programme, expressed the same sentiment, namely that it is theoretically loaded when compared to practice and exposure to real situations. Teacher trainers were also of the view that trainees are only exposed to limited practice (through IEPs) during the teaching practice exercise. These participants are supported by Golder et al. (2005:94) who claim that institutions send a dual message through familiarising students with words about inclusion, but without preparing them to tackle barriers to inclusive development when they start working in schools. Booth (2000:26) has also concluded that many teachers are exposed to the training that is not related to the nature of their job and the conditions of service. The great concern is that there is a marked difference between theory and practice. Teachers also raised this concern that a lack of exposure to practice makes it difficult for them to implement the theory they learnt at the institutions. The researcher is also of the opinion that failure of the programme to

expose trainees to the abovementioned aspects, will result in ineffective implementation of inclusive education and provision of support.

The study by Dupoux et al. (2006:6) confirms that interactions or contact with people with disabilities promoted positive attitudes towards inclusive education. Brownlee and Carrington (2000:104) reached a conclusion from their study in Australia that the pre-service teachers had the view that the special education programme needed to have included more practical experience and practical knowledge about inclusive schooling, in order for teachers to adjust to the expectations of the new inclusive paradigm. Furthermore, Whitworth (undated) asserts that for inclusive education to succeed, it is vital that trainees are exposed early to situations involving individuals who are uniquely abled and who have different learning styles and needs+. The same author also is of the opinion that teacher trainers should demonstrate inclusive practices and accommodate diversity in their classes for trainees to copy and be able to model those while in the field. It is also stated that it is important that the programme allows trainees the chance to observe and work in collaborative, inclusive situations and classes where inclusive practices are being implemented (Whitworth, undated). To further support this view, Guijaro (2000:50) succinctly states that for inclusive education to be successful, every teacher must have basic theoretical-practical knowledge related to attending the needs of diversity, curriculum adaptation, differential evaluation and the most relevant educational needs associated to different kinds of disability, and to social and cultural backgrounds+.

There were school heads who also thought that the programme might not have prepared teachers well for effective implementation of inclusive education and provision of support. They thought this was the reason for teachers' poor performance with regards effective provision of support to learners experiencing barriers to learning and development in classes. In fact, it has been asserted that the new paradigm of education and support necessitates substantial changes to teaching. These changes can only be realised if teachers have undergone relevant training . and teacher training is a key strategy to contribute to these changes (Guijarro, 2000:50).

The combined results show that a high frequency of participants thought that the programme was useful. It is on this ground that the researcher made a conclusion

that the programme was useful in as far as preparing teachers to teach and provide effective support within ordinary classroom settings. However, it is also worth noting that there were limitations to the current programme in terms of limited practice and exposure to learners and making the full paradigm shift to an inclusive environment.

6.3.3 RATING OF TEACHERS' PERFORMANCE ON SUPPORT GIVEN (C)

From the research it is evident that not all teachers provide appropriate and effective support to learners. This was confirmed by both the results from teachers and school heads. Some teachers indicated that they were good and very good, very poor and poor or uncertain in terms of the provision of appropriate support offered to learners in inclusive settings. Hundred and twenty one (121) teachers, as compared to 31 were of the opinion that they were good and very good in the provision of effective support in inclusive classes. Some of the reasons for their responses were that they always noticed progress among the supported students; they were able to attend to individual differences; able to make instructional accommodations; able to prepare and effectively use learning aids and resources and have successfully established support programmes such as SITs. Those who indicated that they were very poor and poor also submitted various reasons that included among others lack of or limited knowledge and skills to provide support; large class sizes as well as the congested school schedule. The teachers' very poor and poor performance was also confirmed by the majority of school heads (39% as compared to 13%).

The researcher is of the opinion that if teachers do not provide appropriate and effective support, there is still marginalisation and/or exclusion of learners experiencing barriers to learning and development in the education system despite the country's effort towards inclusive education. There is a possibility that the same learners may drop out of school. In South Africa for example, Bosch, Lekgau, Matero and Tammi (2000:107) report that the inability of teachers to effectively support learners experiencing barriers to learning results in dropouts, illiteracy, dependency and poverty. In fact, Angelides, Vrasidas and Charalambous (2007:20) asserted that a significant number of studies have been carried out where teachers were pointed out as a barrier to inclusion and as factor of marginalisation. These authors are of the opinion that teachers can consciously or unconsciously marginalise learners experiencing barriers to learning and development. On the other hand, it is

appreciated that there are those learners who have access to appropriate support. This was confirmed by teachers who indicated that their performance level with regard to the provision of appropriate support was good/very good.

It appears as if in Botswana ordinary schools, there are learners who access effective support . while others do not. This situation is also experienced in the Caribbean where it was learnt that a certain percentage had well trained teachers (Porter, 2001:20), and therefore have access to effective support as compared to other learners who are less fortunate.

6.3.4 KNOWLEDGE AND SKILLS ACQUIRED DURING PRE-SERVICE TRAINING AND ITS ADEQUACY (D)

With regard to the adequacy of knowledge and skills, the conclusion was reached that not all teachers who graduated from the two colleges as from 2004 to date have adequate knowledge and skills to effectively function in inclusive settings. Sixty-two percent of the school heads who participated had a concern that teachers do not have adequate knowledge and skills to effectively provide support within inclusive settings. In fact, among various reasons forwarded by participants, the response mostly given was that teachers have confirmed that they do not have the relevant knowledge and skills in the field of special and inclusive education. From the list of knowledge and skills provided (cf. 5.3), a large number of respondents (teachers) did not show the knowledge and skills they have acquired (their responses were missing), and one may comfortably conclude that these are the teachers who felt they did not have any. Moreover, teachers made an argument that there were other special education knowledge and skills that they were not exposed to during pre-service training and this made them ineffective in terms of provision of appropriate support. They revealed that they lack knowledge and skills in material production, guidance and counselling, communication, life skills, inclusion of learners with diverse needs in inclusive classrooms, working with parents, establishment of support programmes, and programmes for supporting the gifted and talented learners.

Teacher trainers also confirmed that teachers lack some of the relevant knowledge and skills for inclusive education and this makes it difficult for them to effectively provide support in inclusive classrooms. This group of participants indicated that the

current programme puts more emphasis on special education as compared to inclusive education . leading to more focus on the medical model than the social model. The implication is that teachers will continue to provide support along the medical model in the field. This point of view is also supported by the knowledgeable persons that the current programme teaches trainees that the problem lies with the child. In turn this will make teachers to focus on the learner only in an effort to address the problem faced by the child. Moreover, the same group had a concern that the programme is mostly theory-based and also that it has inappropriate terminology and therefore will jeopardise the acquisition of adequate and appropriate knowledge and skills by trainees.

From the literature it was also learnt that teacher training programmes do not adequately prepare teachers for inclusive education. For instance, the study by Swart et al. (2002:183) entitled *'implementing inclusive education in South Africa: teachers' attitudes and experiences'* reveals that teachers were of the feeling that the pre-service training did not adequately equip them with the relevant knowledge and skills to effectively support learners diversity in inclusive settings. The study by Sharma et al. entitled *'pre-service teachers' attitudes, concerns and sentiments about inclusive education; an international comparison of the novice pre-service teachers'* carried out in Australia also highlights that on completion of the pre-service training, teachers reported that they did not have the necessary skills to meet the diverse needs they face in their classrooms. The assertion by Mbengwa (2006:70) is that unless teachers are adequately prepared in terms of knowledge and skills, successful implementation of inclusive education and support is impossible. The researcher is of the opinion that inadequate knowledge and skills may lead to teachers negative attitudes towards inclusive education and support. In furthering the argument, Swart et al. (2002:183) maintains that inadequate knowledge and skills may result in feelings of fear and hopelessness and in learners being referred for assessment by specialists, diagnosis and placement in special programmes+ . and thus reverting to the medical model??? Gyimah et al. (2008:71) produced an *'investigation into the emotional reactions to inclusion of Ghanaian mainstream teachers'*, and they established that teaching learners experiencing barriers to learning and development in ordinary schools, led to teachers experiencing

psychological stress since they did not have adequate information about barriers to learning.

On the other hand, there were instances where teachers were said to have adequate knowledge and skills. The reader is made aware of the fact that an insignificant percentage, namely 9% as compared to 62% of school head participants affirmed the adequacy of knowledge and skills by teachers. Moreover, it was also discovered that teachers have different levels of competency and most of them indicated that they were of average level. This can be attached to the broad-based training that trainees underwent. It has to be acknowledged that broad-based training prepares teachers to deal with more than one condition, and in turn closes the gap between general and special education. However, it is necessary to highlight that it may lead to limited knowledge and skills as compared to the studying of a single area (Myreddi & Narayan, 1999:4).

These results clearly indicate that, to a large extent, the current programme does not equip trainees with adequate knowledge and skills for effective inclusive education and concomitant support. According to Sharma et al. (2006:80) it is a necessity that pre-service programmes fully equip teachers with knowledge and skills in order for them to be competent and able to cater for the needs of an increasing range of diverse learners.

6.3.5 TEACHERS' KEENNESS OR ATTITUDE TOWARDS PROVISION OF SUPPORT WITHIN INCLUSIVE SETTINGS (E)

A significant percentage (50%) of participants, in particular school heads, indicated that teachers do not show any keenness or positive attitude to support learners and systems within inclusive classes or schools. Only 29% said teachers were keen to provide support while 15% and 6% respectively were neutral and did not respond. This made the researcher to conclude that not all teachers developed positive attitudes towards inclusive education and support even after their exposure to the programme. In fact, the other group of participants (knowledgeable persons) who were asked if the programme can instil positive attitudes in teacher trainees with regard to provision of support in inclusive settings, unanimously felt that it will be very difficult for trainees to develop a positive attitude in relation to provision of support within inclusive settings since the programme emphasises the medical

model. The medical model of training will instead strengthen the stereotyped beliefs that trainees already have from their communities. This probably implies that if teachers do not develop a positive attitude during pre-service training, it will be very difficult for them to effectively provide support within inclusive education system. Swart et al. (2002:177) are also of the opinion that teachers' beliefs and attitudes can be associated with the more generalised belief systems of their society. The negative attitude of teachers towards inclusive education in Botswana was also established by Brandon (2006:37).

Teacher trainers indicated that they find it challenging to positively influence trainees' attitudes towards inclusive education and support. They associated their difficulty to the programme structure which currently does not or minimally exposes trainees to practical experiences within and outside the training institutions. This implies that trainees are likely to graduate without the right attitude towards provision of support within inclusive settings.

It is worth noting that those teachers who developed positive attitudes would, to some extent, influence effective implementation of inclusive education and support. On the other hand, literature has proved that if teachers are not keen or have a negative attitude then effective implementation of inclusive education will not be realised. Sharma et al. (2006:81) maintain that if teachers hold a positive attitude towards inclusive education it may allow and encourage practices that will guarantee, to a large extent, successful inclusion of all learners. The same authors continue to state that it is crucial for teachers, at the time of graduation to hold positive attitudes because it will not be easy for them to change it once in the field. In the Botswana situation, Brandon (2006:37) concludes that the attitude of Botswana teachers towards the inclusion of learners, particularly with physical disabilities into inclusive classrooms is very important in that it determines the success of the government's effort in implementing inclusive education nationwide. Dart (2007b:63) has also established that the special education awareness programme at the two colleges has a positive effect on trainees' attitudes.

With reference to the distribution of percentages, it was learnt that the higher percentage signified that teachers are not keen and do not have positive attitudes

towards provision of support within inclusive settings, and therefore the researcher reached the same conclusion.

6.3.6 IMPLEMENTATION OF THE ACQUIRED KNOWLEDGE AND SKILLS (F)

With regard to this aspect, the researcher made conclusions looking at the teachers' efforts to initiate support programmes or projects, teachers' efforts to support colleagues who did not undergo any form of special education training, as well as teachers' efforts to employ inclusive methods and practices. The findings showed that 83% as compared to 17% of the graduates communicated that they have not been able to initiate any support programmes or projects aimed at provision of effective support to learners experiencing barriers to learning and development. Mbengwa (2006:76) maintains that school-based support teams and projects are essential especially if the school is located in remote areas where it is not easy to access support material and staff. From the school heads sample, 59% as compared to 17% of the total number of school heads were of the view that the teachers under study do not provide assistance to their colleagues who never had the opportunity to undergo a special education programme. From the same sample, 65% as compared to 14% confirmed that teachers did not initiate any support programmes or projects. The teacher trainers were also of the opinion that the MCE and TCE graduates do not implement the acquired knowledge and skills . and this observation they made during teaching practice supervision. The trainers gave evidence that teachers do not cater for individual needs in terms of assessment, instructional strategies, support programmes and resources. The researcher strongly believes that incapacity of teachers to implement the acquired knowledge and skills may be due to a lack of exposure to inclusive methods, strategies and behaviours during the initial training. In fact, the teacher trainers confirmed during interviews that they are less competent and confident in demonstrating inclusive practices and behaviours during lessons and that they find it challenging to train teachers to effectively provide support within the inclusive system of education. To further support the researcher's argument, Dupoux et al. (2006:10) state that teachers may be the product of their training . they demonstrate what they experienced and observed while at institutions.

Results from interviews with knowledgeable persons also indicated that the programme will probably not significantly influence effective implementation of

inclusive education and support by teachers. As stated earlier on, this group strongly felt that trainees are not exposed to the right model of support through this programme and also not to practical skills.

From the many reasons that were attached to failure of teachers to initiate support programmes or projects as well as to provide assistance to colleagues, lack of or inadequate special knowledge and skills came out prominently in all the groups that addressed the question. The effects of the lack of appropriate knowledge and skills have already been discussed earlier in the chapter. The other factor that was prevalent was a high teaching load. In fact, the participants were of the opinion that teachers are always engaged and therefore do not find time to initiate and participate in special education programmes. Furthermore, the school heads observed that the graduates do not show any team work or collaboration with their colleagues in an effort to effectively provide support to learners in need. Team work or collaboration had been identified as one of the important strategies towards effective implementation of inclusive education and support. In particular, Engelbrecht et al. (1999:158) assert that collaboration enables the sharing and maximum utilisation of the diverse and specialised knowledge of teachers and enables schools to provide quality learning and support within the inclusive system of education. It is worth noting that in order for teachers to effectively use collaboration in the field, the same has to be employed during pre-service training (Whitworth, undated). The other discovery that led participants to conclude that graduates do not implement the acquired knowledge and skills was that in their day to day preparation, teaching and learning processes, teachers do not address individual needs. It was observed that to a large extent, they still utilise whole group approaches and strategies, where the target is the whole class and not individuals. This was also established by Dart through the study on *provision for learners with special educational needs in Botswana; a situational analysis*. This study revealed that the graduates still do not utilise inclusive methods in their classes, and they still show reluctance to employ the learner centred mode of delivery (Mokobane, 2000 and Tabulawa, 2004 in Dart, 2007b:63).

The results clearly show that MCE and TCE graduates who had the opportunity to study special education do not adequately implement the acquired knowledge and skills. One would then wonder how the schools could possibly achieve effective

implementation of inclusive education and support if teachers are not involved in the process. Hay et al. (2001:214) succinctly state that teachers are the key role-players in determining the quality of implementation of any new education policy; in this instance the inclusive education policy.

6.3.7. THE GENERAL STATUS OF THE PROGRAMME (G)

The following were considered in order to come to conclusions on the general status of the current special education programme: books and resources, equipment, relevance, weight, lecturers' confidence and competence, inclusive methods, trainees' attitude, broad-based and awareness structure of the programme. Moreover, challenges experienced at the two colleges in training inclusive teachers as well as the general sentiments about the current programme were also considered to establish the general status of the programme. The participants from all the categories had consensus that the general status of the programme is not satisfactory. For instance, teachers were of the opinion that most of the programme components were in a very poor and poor status (cf. 5.2). Furthermore, teacher trainers also communicated that the current programme exposes trainees to limited knowledge and skills (cf. 5.4.1) and lastly, knowledgeable persons were of the view that doing the programme at an awareness level is not the best option (cf. 5.4.2)

It is evident from the literature that countries and states have certain teacher training programmes in place intended to prepare teachers for effective inclusive education and support; however, the programmes seem not to realise the intended goal. Scholars such as Van Laarhoven et al. (2007:441) found that programmes may fail due to several factors such as cost, disincentives to extend the length and requirements of the programmes, as well as both human and institutional resistance to change. These factors, in particular human and institutional challenges, surfaced as contributory factors to the current programme status. From the empirical investigation, it became clear that the current special education programme is predominantly offered along the medical model of teacher training. Oswald (2007:148) acknowledges that change in paradigmatic framework will not occur easily. The participants made it clear that the products of such a programme will in turn mirror the same practices (the medical model of teaching and support to learners experiencing barriers to learning). According to Stofile and Green (2007:58)

It is generally accepted that teaching practices are informed and shaped by learning theories teachers are exposed to during pre-service training ... The current programme was also found to consist of limited information or content which the participants felt was insufficient to produce a well-grounded and informed teacher for the inclusive millennium. This situation was also observed by Zimba et al. (2007:39) through the study on *'inclusive education in Namibia'*. From this study it was learnt that one of the teacher education challenges was that the special education content in the courses is very limited and in some cases non-existent.

The other factor that influenced participants to view the status of the programme as unsatisfactory was insufficient or lack of training resources and infrastructure. The graduates indicated that this negatively affected trainers' confidence and competence. Trainers also shared the same sentiment, namely that it was really challenging for them to only theorise and not practise or demonstrate inclusive education strategies and approaches. The literature revealed that trainers must demonstrate inclusive education skills if they intend to produce teachers with inclusive education knowledge, skills and attitudes. Whitworth (undated) is of the opinion that a teacher preparation programme must instil in the pre-service teacher an understanding and appreciation of diversity, and trainers have a responsibility to make this happen by mirroring inclusive practices and accommodating diversity in their classes. Lack of resources also negatively affected trainees' confidence and competence in the area of assistive technology and devices. The results indicate that they did not have the opportunity to practice and therefore are not in a better position to utilise those or even assist learners who might be using those in their day-to-day learning. Literature has shown that a teacher's knowledge and skills in the area of assistive technology is of great importance, especially in inclusive teaching and learning (see Villa et al., 2003:23).

The empirical investigation also revealed that there is no clear evidence of inclusive teacher training in the colleges' vision and mission. Does this mean the colleges do not have a responsibility to train and produce inclusive education teachers? If there is no guidance through the vision and mission with regard to inclusive teacher training and support, how then will trainers and trainees succeed in their effort to train and learn inclusive education and support? In fact, the colleges should be guided by the national policy on inclusive education and support. At the time of the

investigation, the national policy on inclusive education was not yet finalised, but was in progress. In the absence of policy and legislation, there is a likelihood of uncertainty and neglect with regard to inclusive education and support (Mbengwa, 2006:69). This opinion has been affirmed by scholars such as Grol (in Malekpour, 2007:91) when stating that there is still a lack of mandatory policies and legislation in developing countries that influence effective implementation of inclusive education and support. Malekpour (2007:92) succinctly states that in the absence of appropriate inclusive policies, there will be no obligation towards the provision of support to those in need. The same scholar continues to assert that without enforcement of these policies, %inclusive education in developing countries will remain at an embryonic stage...+.

It therefore appears as if the special education programme still needs restructuring in order for it to have a much better status that will enable effective inclusive teacher training and concomitant effective support.

6.3.8 INFLUENTIAL FACTORS TO TEACHERS' PERFORMANCE IN SCHOOLS (H)

Both negative and positive factors which influence teachers' performance in the field were identified. According to Porter (2001:16) there are several critical factors that affect teachers' capacity to realise successful outcomes with learners. The critical factors identified by the author include: class size, teachers work load, learner grouping, learning environment, parental involvement, school based support strategies for both teachers and learners as well as the curriculum. With regards to the empirical investigation, the established factors were linked to both human and material resources, attitudes, parental and community involvement, the learner, support from colleagues and SMT, policies, physical environment, curriculum, and a lack of support from relevant ministries, departments and divisions (cf. 5 for more). These factors are not unique to the international scene that hinders effective teacher performance (cf. 2). Their effects were also discussed earlier in the study (cf. 2).

The conclusion reached was that in addition to teacher preparation programmes, there are other factors which need to be considered and addressed in the learning environment in order to realise effective implementation of inclusive education and support. Some of the support strategies towards effective teachers' performance in

inclusive education and ESS were also addressed earlier in the study (cf. 2) and it is believed the support strategies will also be applicable to Botswana's situation.

6.4 CONCLUSION, AND THE CURRENT AND PROPOSED MODEL (I)

The summary of the findings targeted the problem statement, research questions, general aim and objectives and the empirical study. Research findings from both the empirical investigation and literature were integrated in this case to reach conclusions. Moreover, a proposed model for effective teacher training for inclusive education was already presented implicitly. The summary also consisted of problems that surfaced during the entire study as well as recommendations related to a possible future model.

The empirical investigation's results signify that the programme contributes somewhat positively towards effective inclusive education and support. For example, the current special education programme is broad-based and also studied by all teacher trainees. The international literature has also proved that within inclusive education and support, broad-based training is much better as compared to specialisation. The study entitled '*The structuring and the status of education support services in Botswana*' established that specialised training leads to limited knowledge with regard to the provision of effective support to different learners with diverse needs within the inclusive system of education (Mbengwa, 2006:102). Furthermore, all teacher trainees undergo the programme: this also shows an advanced move towards teacher training for effective inclusive education and support. In fact, this is consistent with Pearson and Chambers's (2005:116) general idea that all teachers are teachers of special educational needs. The researcher is of the opinion that if every teacher is a teacher of children experiencing barriers to learning and development, it follows that the concepts and practices of inclusive education and support must be studied by all teacher trainers. Moreover, some of the studied programme aspects have also been highlighted as important in the effective implementation of inclusive education and support. For instance, the programme exposes trainees to the IEP. It was established through literature that IEPs are crucial within the inclusive system of education and therefore it is necessary that teachers learn about and participate in their development and

implementation. Stakes and Hornby (2000:7) confirm that if teachers are not knowledgeable in the area of IEPs, it is unlikely that teachers will effectively play their roles in the processes of developing and implementing those. It has to be highlighted however that there are also some factors, outside of the programme that influence teachers' performance in schools. These factors also need attention whenever teacher performance is considered. The programme also needs to expose trainees to some of these challenges so that they will be able to address those in the field.

Despite the identified programme strengths, the general conclusion reached with regard to the research is that the special education programme at the two colleges (MCE & TCE) is to a large extent not aligned with inclusive education and support. It is therefore the view of the researcher that the programme does not adequately prepare teachers to effectively provide support within the inclusive system of education. Limitations identified concern the model of teacher training, the contents of the programme (e.g. terminology, inclusive concepts, assessment, practical exposure), programme weight, and the availability of training resources. In addition to the programme structure, the researcher discovered that the programme does not achieve the intended results due to various challenges that emanated from the institutions, trainees as well as the nation. It is therefore the view of the researcher that in trying to restructure the teacher training programme, it will also be of utmost importance to address these challenges.

Finally, though the researcher evaluated the current special education programme at secondary colleges of education with regards inclusive education and support, the reader is made aware that the researcher has of recent learnt that there are scholars who already have started researching the boundaries beyond inclusive education. See for example the keynote address by Dyson during the 2nd International Conference on Special Education (ICOSE 2008), where he focuses on equity in education . and reasons that inclusive education may never bridge the huge gaps in performance that are still prevalent in classrooms. Furthermore, in Botswana related stakeholders in the learning and development processes have recently been resourced on issues of child friendly schools.

A proposed model for preparing secondary education pre-service teachers for inclusive education (and beyond?)

The recommendations from the participants (cf. 5) as well as the information from the literature were used as the basis for the proposed model for effective inclusive teacher training. It was also important to consider the current teacher training model as it is indeed a point of departure.

Figure 3: The current model for preparing Botswana secondary education pre-service teachers for special/inclusive education

(Source: DSE special education syllabus, 2000, with some comments from researcher).

- **Status** . Broad-based
 - An awareness programme
 - Terminology still for Special Education
 - Trainers have little or no training on inclusive education and support (not specialists in the area)
- **Training model** . predominantly medical/special education model
- **Focus of support** . learners
 - addressing Special Educational Needs
- **Mode** . compulsory to all trainees
- **Duration** . three years
 - 1 hour per week contact session
- **Assessment/Evaluation** . not examined
 - Predominantly long essays
 - Minimal presentations
 - Limited field exposure (mini project on IEP)
- **Relationship with other subjects** . independent
- **Components** . history of special education in Botswana
 - Attitude towards disability
 - Government policy on special education
 - Types of special educational needs
 - Gifted and/or talented pupils
 - SHEEP model
 - Mainstreaming
 - Access issues (geographical, social, curriculum)
 - Teacher skills (mixed ability teaching skills)
 - Referral issues (identification and diagnosis)
 - IEP
- **Competencies** . understanding of trends prevalent in the History of Special Education in Botswana
 - Evaluate the Special Education Policy
 - Make an inventory of attitudes towards disability in Botswana
 - Show awareness of what SEN are in terms of causes, characteristics, assessment and implication for teaching SEN
 - Able to state and explain the different components of the SHEEP model and shadowing as examples of child observation
 - Be able to observe a child, record observations and make evaluations leading to possible identification of SEN and possible intervention

strategies

- Describe, discuss and evaluate the major arguments involved in the issue of mainstreaming
- Identify the major areas of access concern, i.e geographical, social and curriculum access
- Suggest practical examples how access can be improved for people with SEN
- Make instructional plans which reflect mixed abilities in a classroom setting
- Be aware of the present referral systems available in Botswana at school, regional and national level, and how to process such referrals
- Be aware of the handicapping role of the government, and to describe the consequences of that for a particular child
- Create or produce examples of differentiated material
- Adapt learning materials for pupils in the student's major subject area
- Define what is meant by an IEP and describe major components of an IEP
- Design an IEP for use during Teaching practice
- Implement an IEP exercise during Teaching Practice
- Identify and analyse relevant literature pertaining to Special Education
- Identify and use community resources and networking, locally, nationally and internationally
- Positive attitude towards disability

Figure 4: A proposed model for preparing Botswana secondary education pre-service teachers for inclusive education (and beyond?).

- **Status** . general introduction . broad-based, compulsory component on inclusive education and support, specialisation in any of the areas in the current model
 - Fully fledged programme (programme studied in-depth)
 - Terminology should indicate a move towards inclusive education and support
 - Trainers should have continued professional development on inclusive education and support (not specialists)
- **Training model** . social/ecosystemic/inclusive education model, with the medical model supporting individual interventions
- **Focus of support** . learners and systems
 - Addressing barriers to learning and development
- **Mode** . compulsory
- **Duration** . three years
 - At least three contact sessions per week
- **Assessment/evaluation** . examinable
 - Portfolios
 - Case studies
 - Mini presentations
 - More focus on field exposure (internship, practicum and school visits)
 - Projects
- **Relationship with other programmes** . some aspects of the programme need to be infused in other programmes, there is also a need for a fully fledged department
- **Components** . trends prevalent in the History of Special Education in Botswana
 - Understanding the paradigm shift from special to inclusive education and support
 - Learn about the inclusive education policy and be able to evaluate it
 - Inclusive education and support
 - Inclusive education techniques and strategies
 - Barriers to learning and development
 - Teacher behaviour towards inclusive education and support
 - Action research
 - Communication and collaboration
 - Understanding and handling diversity
 - Change management (teacher as a facilitator)
 - HIV and AIDS and inclusive education
 - Assistive technology
 - Community involvement
 - Assessment
 - Curriculum and content adaptation or modification
 - Individualised Education Programmes (IEPs)
 - Outsourcing
- **Competencies** . understanding trends prevalent in the History of Special Education in Botswana
 - Be able to:**
 - understand and account for the paradigm shift from special education to inclusive education and support
 - compare Botswana's policy with the international policies on inclusive education and support

- understand what constitute inclusive education, inclusive schools and focus of support within the inclusive system of education
- make accommodations for learners in terms of the curriculum, activities and evaluation procedures
- employ inclusive education practices and modify material
- identify, develop and utilize available resources
- address diversity by being able to employ various instructional strategies that may include multi-level teaching, cooperative learning and peer tutoring
- demonstrate collaborative skills to enable for instance, peer teaching, collaborative planning, cooperative planning and collaborative evaluation
- employ appropriate communication skills (sign language, Braille and total language communication) and skills to communicate with related stakeholders
- appropriately provide counselling skills
- employ reflective skills
- demonstrate situation analysis skills
- establish school based support teams
- develop learning support programmes
- appropriately and competently identify and refer learners
- facilitate and influence change
- establish working partnership with parents and communities
- establish and acquire support from communities
- demonstrate appropriate behaviours and attitudes towards inclusive education and support
- manage and utilise assistive technology
- carry out research on areas of inclusive education that would effectively influence policy
- establish and identify barriers to learning.
- understand intensity of support needed

As conclusion to this study, certain limitations will be highlighted and recommendations for possible further investigation made.

6.5 LIMITATIONS OF THE STUDY

- The researcher had difficulties in making sure that the questionnaires reached all the places intended for the study;
- initially the return rate was very low and this made the researcher to drive long distances (within a radius of 200km) to hand-deliver and collect the questionnaires to those schools that did not initially respond;
- even after hand-delivering the questionnaires some schools did not complete the questionnaires . sometimes the researcher drove for such a distance only to come back empty-handed;
- some of the questionnaires were not returned even after consistent follow-up.
- The researcher experienced great challenges in terms of duplication of questionnaires . the college, just like many other institutions was highly affected by the global economic recession . and at times resources were not available;
- the researcher needed a research assistant, especially because the target population was big, the research had four categories of participants and also that the researcher studied on part-time mode;
- the financial expenditure was strenuous for the researcher and
- at times it was very difficult to share time between research and the work at college.

In addition to these personal challenges, the other limitations were that the study area (inclusive education and support) is still new in the country of study. This means that not all people are knowledgeable in the area and this may lead to participants giving insufficient information. Furthermore, it was learnt during study that not all people have positive attitude towards inclusive education and this again may jeopardise the quality and validity of responses. There are graduates who indicated that they had a negative attitude towards the special education programme, this indicates that the information provided by these participants may give a false picture regarding the programme.

6.6 RECOMMENDATIONS FOR FUTURE RESEARCH

- Research should be carried out to establish the difference between the performance of graduates in rural and urban areas;
- research should be conducted to establish the relationship between teachers' performance and their experience;
- research should be conducted to establish the relationship between teachers' performance and their school heads' knowledge level of inclusive education and support and
- research should be conducted to compare the performance between the MCE and TCE graduates.

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ADDENDUM A: REQUEST LETTER TO THE PERMANENT SECRETARY (PS) BY THE STUDENT

P/Bag T3
Tonota
25/08/2009

The Permanent Secretary
Ministry of Education Skills & Development
P/Bag 005
Gaborone

Dear Madam

REQUEST FOR PERMISSION TO CONDUCT A RESEARCH IN SPECIAL EDUCATION FOR A DOCTORAL DEGREE

I herein request for permission to conduct a research in Special Education . Inclusive education and Education Support Services. The study is ~~u~~Adjusting secondary teacher training programmes in Botswana to ensure effective support within inclusive education.

Information will be sought from graduates of Molepolole and Tonota colleges of Education who studied Special Education during training (graduates from 2004 to date), as well as some of the junior secondary school heads. Furthermore, the researcher will conduct semi-structured interviews with teacher trainers at Molepolole and Tonota colleges as well as knowledgeable persons in the field of special education . inclusive education and support. The latter will consist of an official from the Division of special Education, one from the University of Botswana and two others from neighbouring countries (currently identified as South Africa and Lesotho).

I hope the findings will be beneficial to the country as a whole.

Thank you in anticipation

Yours faithfully

Elizabeth B. Mbengwa (st nr 2004191926).

ADDENDUM B: REQUEST LETTER TO THE PERMANENT SECRETARY (PS) BY THE SUPERVISOR

20 August 2008

The Permanent Secretary
Ministry of Education
Private Bag 005
Gaborone

Dear Sir/Madam

REQUEST OF MS E B MBENGWA TO CONDUCT DOCTORAL DEGREE RESEARCH

Ms Mbengwa (st nr 2004 1919 26) is an enrolled Ph D student in Psychology of Education at our institution. She has registered her research title as:

Adjusting secondary teacher training programmes in Botswana to ensure effective support within inclusive education

We would herewith like to apply for permission to do the empirical part of her research in Botswana, in the sections and schools indicated in her letter. The research will be conducted via questionnaires, focus group interviews and in-depth interviews, and will be handled with the highest level of ethical behaviour.

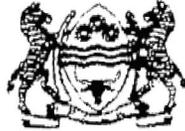
Your consideration will be appreciated!

Prof Johnnie Hay

Promoter +27 51 401 3898

ADDENDUM C: PERMISSION FROM PS TO DO RESEARCH

TELEPHONE: 3655400
TELEX: 2944 THUTO BD
FAX: 3972531/3655408
REFERENCE E 1/20/2 VI (20)



MINISTRY OF EDUCATION
PRIVATE BAG 005
GABORONE
BOTSWANA

REPUBLIC OF BOTSWANA

10th SEPT, 2009.

To: Mrs Elizabeth Badirwang Mbengwa
Private Bag T3
Tonota

RE: PERMISSION TO CONDUCT A RESEARCH STUDY ON: "Adjusting Secondary Teacher Training Programmes in Botswana to Ensure Effective Support within Inclusive Education."

We acknowledge receipt of your application to conduct a research on the topic mentioned above.

This serves to grant you a permit to conduct your study at institutions; Molepolole and Tonota Colleges of Education and Junior Secondary Schools in Botswana to address the following objectives:

1. *To explore and examine international policies and guidelines with regards to special/inclusive education teacher training programmes.*
2. *To explore and examine policies and guidelines with regards to special/inclusive education training programmes in Junior Secondary Teacher training Colleges in Botswana.*
3. *To evaluate the special education programmes- on teacher effectiveness in the field.*
4. *To propose a model for the implementation of special/inclusive education programmes in Junior Secondary Teacher Training Colleges in Botswana.*

However, you are advised to seek **Consent** from the Institutions mentioned in the foregoing paragraph: Chief Education Officers, TT&D, College Principals, School Heads, Teachers and any other relevant persons you are going to interview and/or administer questionnaires in their programmes. You should also ensure that you do not disturb the Institution's activities. We hope and trust that you will conduct the study as stated in your Proposal and to strictly adhere to the Research Ethics. **Failure to comply with the above Regulations will result in Immediate Termination of the Research Permit.**

Please note that this permit is valid for a period of one year effective from 10th Sept, 2009 to 10th Sept 2010.

You are furthermore requested to submit a copy of your final report of the study to the Division of Planning, Statistics and Research, Ministry of Education, Botswana.

Thank you.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Joseph Morupisi'.

Joseph Morupisi

For / Permanent Secretary

ADDENDUM D: CONSENT LETTER TO THE DIRECTOR – TT&D

Private Bag T3
Tonota
October 5, 2009

The Director
Teacher Training and Development
Private Bag 00188
Gaborone

Ufs: Principal (Tonota College of Education).....

Dear Sir/Madam

RE: SEEKING FOR CONSENT TO CONDUCT RESEARCH

I am a student doing PhD with the University of Free State in South Africa. I wish to conduct a research entitled **“Adjusting Secondary Teacher training Programmes in Botswana to Ensure Effective Support within Inclusive Education.”** I therefore kindly seek your consent on this matter. I have since been granted permission by the Permanent Secretary (PS) . Ministry of Education (see letter attached) to conduct the research. Data will be collected by conducting in-depth semi-structured interviews with Special Education lecturers at Molepolole and Tonota Colleges of Education during the month of October, 2009.

Thanking you for anticipated consideration in this regard,

Yours truly

Elizabeth B. Mbengwa (Tel: 2484295 - work; Mobile: 71445711)
(Researcher)

cc The Principal (Molepolole College of Education)

**ADDENDUM E: CONSENT LETTER TO CHIEF EDUCATION
OFFICERS**

Private Bag T3
Tonota
September 14, 2009

Chief Education Officer

Dear Sir/Madam

RE: SEEKING FOR CONSENT TO CONDUCT RESEARCH

I am a student doing PhD with the University of Free State in South Africa. I wish to conduct a research entitled “**Adjusting Secondary Teacher training Programmes in Botswana to Ensure Effective Support within Inclusive Education.**” I therefore kindly seek your consent on this matter. I have since been granted permission by the Permanent Secretary (PS) . Ministry of Education (see letter attached) to conduct research in Junior Secondary Schools in Botswana. Data collection will be done through a questionnaire . one to teachers and the other to School Heads. The period allocated for distribution and completion of copies of questionnaires is September till November.

Thanking you for anticipated consideration in this regard,

Yours truly

Elizabeth B. Mbengwa (Tel: 2484295 - work; 71445711- mobile)

(Researcher)

ADDENDUM F: CONSENT LETTER TO SCHOOL HEADS

Tonota College of Education
P/Bag T3
Tonota
21/01/10

The School Head

Dear Sir/Madam

RE: SEEKING FOR CONSENT TO CONDUCT RESEARCH IN YOUR SCHOOL

I kindly seek your consent to conduct research in your school. I am currently busy with my doctoral studies and have been granted permission by the Permanent Secretary (PS) . Ministry of Education - to conduct the study in Botswana community junior secondary schools (copy attached).

The study covers all five regional supervisory areas of the secondary department. Four teachers from each of 102 randomly selected schools will participate so that a total of 408 teachers form the study sample. Moreover, school heads of the same schools are also requested to participate in the study. On this note, you are kindly requested to 1) complete the school heads questionnaire and also 2) randomly choose four teachers from your school on behalf of the researcher, to participate in the study by completing the teachers questionnaire. **Please note that only Molepolole and Tonota Colleges of Education graduates (as from 2004 to date) should complete the teachers' questionnaire.** Confidentiality is assured to all participants.

As stated previously, the researcher is currently a Ph D student at the University of the Free State, South Africa. It is the requirement of the institution that the student completes a thesis in order to acquire the qualification. I am therefore undertaking a research on **“Adjusting secondary teacher training programmes in Botswana to ensure effective support within inclusive education”**

The purpose of the study is to evaluate the special education programme offered at the two sister colleges in terms of effective support within an inclusive education environment. I hope the findings will reveal to Teaching Service Management, Ministry of Education, Division of Special Education, curriculum designers and related stakeholders the appropriateness and effectiveness of the special education programme offered. Furthermore, the findings may possibly be used as a basis for reviewing the current teacher curriculum in order to align it with inclusive education and support. The study may also encourage teachers to initiate and implement projects in trying to effectively support learners within the inclusive system of education.

Please use the enclosed envelope to post the completed questionnaires to the undersigned. It would be very helpful and highly appreciated if the researcher can receive the completed questionnaires by the 4th of February 2010.

I will be grateful if my request for conducting the study in your school will be favourably considered.

Thank you in advance for your cooperation.

Yours truly

Elizabeth B. Mbengwa (71445711).

ADDENDUM G: QUESTIONNAIRE FOR TEACHERS

INSTRUCTIONS

This questionnaire aims to evaluate the special education programme offered at Molepolole and Tonota colleges of Education in relation to support to learners within inclusive education. **It is important to notice that this questionnaire should only be completed by graduates of Tonota and Molepolole colleges of education (2004 to date).**

For this research, barriers to learning is used instead of Special Educational Needs (SEN)

Please answer all questions to the best of your ability. If a written answer is required, please print. If only a cross is required, please select only one answer per question and do it as in the example.

Example - I prefer special schools for all learners experiencing barriers to learning.

Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
X	5		4		3		2		1

GENERAL INFORMATION

1. Please indicate your gender.

Male		Female	
	0		2

2. Please indicate your training institution.

Molepolole college of Education (MCE)		Tonota College of Education (TCE)	
	0		1

3. Please indicate your year of graduation.

2004		2005		2006		2007		2008		2009	
	1		2		3		4		5		6

4. Please indicate your teaching experience.

0-1 years		2-3 years		4-5 years		6-7 years	
	1		2		3		4

5. Please indicate the location of your school

a.

Rural	Urban
0	1

b.

Southern region	South central region	Central region	North region	West region
1	2	3	4	5

THE EVALUATION OF THE SPECIAL EDUCATION COURSE – ON TEACHER EFFECTIVENESS

6. a. Which type of learners experiencing barriers to learning do you currently have and provide support to in your classes? **(more than one option may be given)**

Visually impaired	Hearing impaired	Emotional and behavioural difficulties	Speech impaired	Gifted learners	Other(s)
1	2	3	4	5	6

b. If you indicated other(s) in question 6.a, please specify those.

c. How would you rate yourself with regards to the provision of appropriate support you offer to learners experiencing barriers to learning in inclusive classrooms and schools?

Very good	Good	Uncertain	Poor	Very poor
5	4	3	2	1

d. Please elaborate on your answer.

7. a. How useful was your special needs education programme in preparing you to teach and support those learners in inclusive classrooms and schools?

Very useful		Quite useful		Not very useful		Not at all useful		No response	
	5		4		3		2		1

b. Please elaborate on your response.

8. a. I have knowledge and skills in: **(more than one option may be indicated)**

Knowledge and skills in:	Indicate with 'X'
Assessment and identification of learners experiencing barriers to learning	
Curriculum & content adaptation/modification	
Collaboration	
Use of Assistive technology	
Development and implementation of Individualised Education Program (IEP)	
Obtaining resources from the community	
Other (s)	

b. If you have indicated other(s) in question 8.a, please specify those.

- c. By using a scale of 1 to 5, show how confident and competent you are in the knowledge and skills indicated in questions 8.a and 8.b. From the scale, the higher the number the more confident and competent the teacher is. Use the remaining rows for knowledge and skills indicated in question 8.b if applicable.

Rating

Knowledge & Skills	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Assessment and identification					
Curriculum & content adaptation/modification					
Collaboration					
Assistive technology					
Individualised Education Program (IEP)					
Obtaining resources from the community					

- d. Please motivate well why you allocated a specific rating in 8.c. Use the table below.

Knowledge & skills	Rating (from 8c)	Motivation
Assessment and identification		
Curriculum & content adaptation/modification		
Collaboration		
Assistive technology		
Individualised Education Program (IEP)		
Obtaining resources from the community		

9. a. Do you feel there are other special education knowledge and skills that you were not exposed to during your pre-service training that would help you to effectively support learners experiencing barriers to learning and colleagues in inclusive classrooms and settings?

Yes	No	Uncertain
3	2	1

b. If your answer for question 9.a is %yes+, please indicate those.

c. If your answer for question 9.a is %no+, please elaborate on your response.

d. If your answer for question 9.a is %uncertain+, please elaborate on your response.

10. a. Have you been able to initiate support programme(s)/projects in your school to effectively support learners experiencing barriers to learning and colleagues within the inclusive system of education?

Yes	No
1	0

b. If affirmative, indicate programme(s)/projects you have initiated.

c. If not affirmative, what do you think contributes to this?

11. What factors in the school positively or negatively affect your performance in effectively providing support to learners and colleagues within an inclusive learning environment? Please indicate them in the table below.

Positive factors	Negative factors

12. Please use the following components to assess the status of the special education programme you underwent at college . and also indicate the effects it has on teacher effectiveness to provide appropriate support to learners and systems in inclusive settings.

(Please mark (X) next to the appropriate number by referring to the scale)

Very good		Good		Average		Poor		Very poor	
	5		4		3		2		1

a. Special education books and resource material in the college library.

i. Status

	5		4		3		2		1
--	---	--	---	--	---	--	---	--	---

ii. Effects

b. Specialised equipment and resource room for demonstration.

i. Status

	5		4		3		2		1
--	---	--	---	--	---	--	---	--	---

ii. Effects

c. Relevance of the special education programme content and methodologies to issues of teacher training for effective inclusive education and support.

i. Status

	5		4		3		2		1
--	---	--	---	--	---	--	---	--	---

ii. Effects

d. Weight and attention given to the course (time, assessment, opportunities for practical work).

i. Status

	5		4		3		2		1
--	---	--	---	--	---	--	---	--	---

ii. Effects

e. Special education lecturers confidence and competence on issues of inclusive education and support.

i. Status

	5		4		3		2		1
--	---	--	---	--	---	--	---	--	---

ii. Effects

f. Utilisation and demonstration of inclusive methods and behaviours in classrooms by lecturers necessary for effective support within inclusive education.

i. Status

	5		4		3		2		1
--	---	--	---	--	---	--	---	--	---

ii. Effects

g. Your attitude towards the special education course.

i. Status

	5		4		3		2		1
--	---	--	---	--	---	--	---	--	---

ii. Effects

13. Please make recommendations in relation to the special education programme so that it better equips teacher trainees with the necessary and relevant knowledge and skills for an inclusive system of education and support.

Thank you very much for kindly and honestly completing the questionnaire.

ADDENDUM H: QUESTIONNAIRE FOR SCHOOL HEADS

INSTRUCTIONS

This questionnaire aims to establish if the special education programme offered at Molepolole and Tonota colleges of education equips teachers with knowledge and skills necessary for effective inclusive education and support. **The focus of the research is only on teachers who graduated from the two colleges as from 2004 to date.**

For this research, barriers to learning is used instead of Special Educational Needs (SEN)

Please answer all questions to the best of your ability. If a written answer is required, please print. If only a cross is required, select only one answer per question and do as in the example.

Example: Inclusive education is the best form of education for all learners experiencing barriers to learning.

Strongly agree		Agree		Neutral		Strongly disagree		Disagree	
X	5		4		3		2		1

GENERAL INFORMATION

1. Please indicate your gender

Male		Female	
	0		1

2. Please indicate your age

Less than 35 years		35-40 years		41-50 years		51-60 years		61 and older	
	1		2		3		4		5

3. Please indicate the period you have been in the current position

0-5 years		6-10 years		11-15 years		16-20 years		21 and more years	
	1		2		3		4		5

4. Please indicate your knowledge level on inclusive education and support

Exceptional		High		Average		Uncertain	
	4		3		2		1

THE EVALUATION OF THE SPECIAL EDUCATION COURSE - ON TEACHER EFFECTIVENESS

5. a. Teachers are keen to support learners experiencing barriers to learning in classes consisting of learners with different learning needs (inclusive classes).

Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	5		4		3		2		1

- b. Please elaborate on your response.

6. a. Teachers have been helpful in assisting other colleagues who have not done the special education course on how to handle and support learners experiencing barriers to learning in inclusive classrooms.

Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	5		4		3		2		1

- b. Please elaborate on your response.

7. a. Teachers have initiated programmes/projects towards the effective support of learners experiencing barriers to learning within an inclusive learning environment.

Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	5		4		3		2		1

- b. If you strongly agreed/agreed in question 7.a please indicate the support programmes/projects initiated.

- c. If you strongly disagreed/disagreed in question 7.a - what do you think contributes to this?

8. a. Teachers have adequate knowledge and skills in special education that help them to effectively support learners experiencing barriers to learning, and other systems in inclusive learning environments.

Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	5		4		3		2		1

b. Please elaborate on your response.

c. If your answer for question 8a is strongly agree/agree, please indicate the skills you have observed.

d. If you strongly disagreed/disagreed in question 8.a, what skills do you think teachers should be equipped with, to be able to effectively support learners and systems in an inclusive learning environment?

e. Generally, how would you rate teachersq (Tonota and Molepolole graduates) performance with regards to supporting learners experiencing barriers to learning and other systems in an inclusive learning environment?

Very good	Good	Uncertain	Poor	Very poor
5	4	3	2	1

9. As the school head - together with the entire senior management team - how have you encouraged teachers in their effort to effectively support learners and systems in an inclusive learning environment?

10. a. In addition to teachers knowledge and skills - what other factors positively or negatively influence teachers efforts in the provision of effective support in inclusive classes and schools?

b. Please motivate well why you think the factors identified in 10.a have the said influence. Complete the table below.

Influential factors	Influence (positive/negative)	Motivation

11. What are your recommendations regarding improvement of inclusive teacher training and support in the two teacher training colleges?

YOUR COOPERATION IS HIGHLY APPRECIATED.

ADDENDUM I: INTERVIEW SCHEDULE FOR TEACHER TRAINERS

THE EVALUATION OF THE SPECIAL EDUCATION PROGRAMME – ON TEACHER EFFECTIVENESS.

1. Do you feel competent and confident to train teachers to effectively provide support to learners experiencing barriers to learning?
 - Awareness of the shift in the focus of support(learner focus to systems focus)
 - Ability to demonstrate the appropriate model during training
 - Adequate knowledge and skills on inclusive education and support(inclusive policies, appropriate terminology, assessment procedures, identification of intrinsic & extrinsic barriers, various inclusive practices and techniques, intensity of support required, IEPs, outsourcing of resources locally and nationally, self reflections, admissions to special and regular schools)

2. Do you demonstrate inclusive practices and behaviours during your lessons?
 - How do you influence teacher trainees' attitude in relation to teaching and supporting learners in the inclusive classes and schools?
 - What strategies and techniques do you use during teaching that you think teacher trainees must learn and employ those for effective support?
 - Do you use appropriate terminology in your everyday teaching?
 - Do you ever encourage trainees to do self-reflections by doing those yourself?

3. What challenges do you face in trying to meet the demands of inclusive teacher training and support in the college?
 - Focus of the current syllabus
 - Your competency in inclusive education and support
 - Training resources
 - Support from the college principal and senior management team
 - Support from the division of special education
 - College policy on inclusiveness and support

4. Do you think the special education programme exposes teacher trainees to adequate knowledge and skills necessary for inclusive teaching and support in the field?
 - Does the course expose trainees to skills necessary for inclusive education, the skills that would enable them to manage diversity in classes and schools?
 - Does the course expose trainees to basic screening procedures?
 - Does the course allow trainees to learn and be able to identify various challenges to learning and development?
 - Does the course equip trainees with knowledge and skills on developing intervention strategies to support learners?
 - Does the course equip trainees with skills necessary for mobilisation and utilisation of available resources at local and national level?
 - Does the course equip trainees with skills necessary for self reflection?

5. During teaching practice do you ever see teacher trainees implementing what they have learnt at college with respect to teaching and supporting learners with SEN in their classes?
 - Do they know their learners?
 - Do they appreciate and cater for learners diversity?
 - Do they develop and implement IEPs?
 - What assessment procedures do they employ?
 - Are they keen to identify and address both intrinsic and extrinsic factors?
 - Do they develop and use available learning resources?

6. Have you learnt of any support programmes/projects that your teacher trainees have initiated while on teaching practice to support learners with SEN and their colleagues who did not train in special education? Example;
 - School Intervention Teams (SITs)?
 - Learner support groups (e.g peer tutoring, tutorials, peer evaluation, clubs)?
 - Teacher support networks(team planning and teaching, discussions, internal workshops and seminars)
 - Parent . teacher networks

7. What is your general feeling with regards to the special education course offered?
 - Weight, attention given to the programme (content, assessment, time, practical)?
 - Type of the programme (broad based, awareness, separate)?
 - Resources allocated to training teachers (both human & material)?
 - Attitude of teacher trainees?

8. In general can you say the special education programme is aligned to inclusive teacher training and support?
 - Content and objectives of the course
 - Status of the course (broad base)
 - Model of training . dominance of the medical model
 - Teacher trainers qualifications and experiences
 - Training resources
 - Training exposure(link between college & schools, on training experiences/practical work)

9. Please make specific recommendations with regards to the special education programme so that it can even more adequately equip teacher trainees with knowledge and skills relevant to support learners appropriately within inclusive education.

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ADDENDUM J: INTERVIEW SCHEDULE FOR KNOWLEDGEABLE PERSONS

THE EVALUATION OF THE SPECIAL EDUCATION PROGRAMME - ON TEACHER EFFECTIVENESS

Special education programme offered	Characteristics
	<p>Broad based</p> <p>Awareness programme</p> <p>Offered to all trainees for 3 years at college</p> <p>A trainee has one contact session (an hour) per week</p> <p>Not examinable (theory and practical work)</p> <p>Programme not infused in subjects</p> <p>Predominantly theory based</p> <p>Constitute to acquisition of the diploma qualification</p>

1. Use your knowledge and understanding of inclusive education and support to evaluate the kind of special education programme reflected in the table.
 - Can it allow trainees to learn and acquire knowledge and skills appropriate for teachers to effectively provide support in an inclusive learning environment?
 - Can it instil positive attitude in teacher trainees with regard to provision of support in inclusive classes and schools?
 - Against the background that it is not examined does it have the capability to motivate trainees to study and learn?
 - Can it influence effective implementation of inclusive education and support?

2. What components should be contained in the special education programme that is meant to produce competent teachers in the area of inclusive education and support?
 - What courses/modules should be included in the programme?
 - Which model of support should be emphasised?
 - What knowledge and skills should the programme instil in teacher trainees?
 - What behaviours should the programme instil in teacher trainees?

3. What should be the status of the special education programme?
 - Infused or taught separately?
 - Broad based only? Specialisation only? Or broad based followed by specialisation?
 - Compulsory to all trainees or optional?
 - Taught by specialists?
 - Should be tailored as per the need of schools and communities?
 - Awareness programme?

 4. What are the contributory factors towards appropriate teacher training for inclusive education and support?
 - Factors related to teacher trainees
 - Factors related to human and material resources
 - Factors related to the philosophy of inclusive education and support (policies, curriculum)

 5. What are the challenges faced in training teachers for effective inclusive education and support?
 - Methodologies at training institutions
 - Training personnel . not trained in inclusive education and support
 - Unclear training guidelines (motive for training teachers in special education)
 - Attitudes
 - Financial commitment
 - Collaboration (concerned departments and stakeholders)

 6. What strategies must be put in place to minimise the challenges?
 - Personal (trainees, trainers)
 - College/institution level
 - National level

 7. What challenges are teachers likely to face at schools in trying to provide effective support in inclusive environments?
 - Personal level
 - School level
 - Community level
 - National level

 8. How can the challenges be addressed?
 - Personal level
 - Local level
 - Community level
 - National level

 9. Please make specific recommendations regarding the improvement of inclusive teacher training and support in training institutions.
-