

**TESTING IN INCLUSIVE EDUCATION SETTING IN PRIMARY SCHOOLS IN
KENYA**

BY

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This research project submitted in partial fulfillment of the requirement of the degree of Masters of Education in Measurement and Evaluation.

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DECLARATION

This project report is my original work and has not been presented for a degree in any other university.

.....

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This research project has been submitted for examination with my approval as University supervisor.

.....

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DEDICATION

This research project is dedicated to my dear mum- Rahab and dad- Paul whom enthusiastically motivated and encouraged me during this study. Their motivation, encouragement, prayers and support are immeasurable and worth special tribute. God bless them.

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I would like to acknowledge the invaluable guidance and advice provided by my research supervisor Dr. Karen T. Odhiambo. Her support, patience and encouragement throughout the study are gratefully acknowledged. I pay special tribute to head teachers who allowed their schools to be used for data collection for this study. I also acknowledge the immeasurable contributions of teachers who participated in data collection. Finally I acknowledge the incredible support of Shadrack Masila for his invaluable secretariat support.

ABSTRACT

The hallmark of testing in inclusive setting is the support of the learners with special needs in the mainstream classrooms. The provision of appropriate testing in regular schools is faced by rampant challenges. The purpose of this study was to determine adequacy of assessment practice in inclusive education situations in Kenya. The objectives that guided this study are, to investigate knowledge and skills of testing in inclusive setting, physical and structure of testing in inclusive setting, school approach in testing in inclusive setting, behaviour of teachers and learners on testing in inclusive setting and national policy for inclusivity on testing in inclusive setting.

In this study the researcher used mixed analysis where both quantitative and qualitative techniques were used within the same frame work. The study involved a population of forty respondents from eight public primary schools in Thika East Sub County in Murang'a County. The sample was selected through purposeful sampling technique where the sample was based on the knowledge and experience of the respondents. The researcher also used the descriptive approach to turn the data on the questionnaires into numbers according to 5 point Likert scale. The data was then analyzed using the SPSS version 21 and presented on tables and graphs for easy interpretation.

From the outcome of this study, testing practice in inclusive education setting seem to be faced by rampant challenges related to knowledge and skills, physical and structure, school approach, behavior of teachers and learners as well as national agenda for inclusivity in Kenya. This concurs with findings of Chhabra et al (2010) on inclusive education in Botswana. He contends that testing is faced by challenges such as lack of trained personnel, learning resources, educational facilities and testing policies of testing in inclusive setting. The implication of results of this study is that there is indeed inadequate assessment practice in inclusive education settings. There is need to equip teachers with knowledge and skills in testing in inclusive education, appropriate educational resources, proper school approaches, appropriate testing policy. There is also need to encourage teachers and learners behaviour that support learners with special needs in inclusive setting

TABLE OF CONTENTS

DECLARATION	ii
DEDICATION.....	iii
ACKNOWLEDGEMENT	iv
ABSTRACT.....	v
TABLE OF CONTENT.....	v
LIST OF TABLES	ix
LIST OF FIGURES	x
ABBREVIATIONS	xi
CHAPTER ONE	1
1.0 Introduction.....	1
1.1 Background of the Study	1
1.2 Statement of the Problem.....	3
1.3 Purpose of the Study	4
1.4 Objectives of the Study.....	4
1.5 Significance of the Study	5
1.6 Justification of the Study	5
1.7 Terminologies	7
CHAPTER TWO.....	8
2.0 Literature Review.....	8
2.1 Related studies	8
2.2 Literature on the study	10
2.2.1 Inclusive education	11
2.2.2 Forms of inclusive education	12
2.2.2.1 Regular inclusion	12
2.2.2.2 Full inclusion	12
2.2.3 Need for practicing inclusive education.	13
2.2.4 History of inclusive education	14
2.2.5 Inclusive education in developed countries	17

2.2.6 Inclusive education in developing countries.....	19
2.2.7 Inclusive education in Kenya.....	21
2.2.8 Testing in inclusive education.....	23
2.2.9 National policies for inclusive education in Kenya	24
2.2.10 Attitudes of teachers in favor of inclusive education.....	25
2.2.11 Attitudes of teachers in disfavor of inclusive education	30
2.2.12 Factors that influence attitudes of teachers towards testing in inclusive education	33
2.2.13 Teacher expectations.....	35
2.2.14 Barriers to testing in inclusive education.....	35
2.3 Theories of inclusive Education.....	37
2.3.1 Social learning theory	37
2.3.2 Observation learning theory.....	38
2.3.4 Planned behavior theory	39
2.4 Conceptual Framework.....	40
Summary	42
CHAPTER THREE	43
3.0 Methodology	43
3.1 Introduction.....	43
3.2 Research design	43
3.3 Target population	44
3.4 Sample size and sampling procedures	44
3.5 Data collection instruments.....	45
3.6 Data analysis and interpretation.....	45
3.7 Ethics during the research.....	45
3.8 Problems to be encountered during the research	46
Summary	46
CHAPTER FOUR	47
4.0 Data analysis and presentation.....	47

4.1 Introduction.....	47
4.2 Response rate	47
4.2.1 Demographic variables of the participants	48
4.2.2 Knowledge and skills related challenges in testing in inclusive setting	50
4.2.3 Physical and structural challenges of testing in inclusive setting.....	56
4.2.4 School approach related challenges of testing in inclusive setting.....	62
4.2.5 Behaviour of teachers and learners related challenges of testing in inclusive setting.....	67
4.2.6 National agenda for inclusivity related challenges	72
CHAPTER FIVE	76
5.0 Summary, conclusions and recommendations.....	76
5.1 Introduction.....	76
5.2 Summary of the findings.....	76
5.2.1 Knowledge and skills related challenges of testing in inclusive setting	76
5.2.2 Physical and structural related challenges of testing in inclusive setting	77
5.2.3 School approach related challenges of testing in inclusive setting.....	78
5.2.4 Behaviour of teachers and learners related challenges of testing in inclusive setting	78
5.2.5 National agenda for inclusivity in Kenya	80
5.3 Conclusion	80
5.4 Recommendations.....	81
5.5 Suggestions for further research	82
BIBLIOGRAPHY	83
REFERENCES.....	87
APPENDICES.....	89
Appendix: I	89
Appendix: II.....	93
Appendix: III.....	94
Appendix: IV	95

LIST OF TABLES

Table 1: Demographic characteristics of the participants.....	48
Table 2: Tally Sheet	50
Table 3: Mean response rates of knowledge and skills related challenges in inclusive setting.....	53
Table-4: Descriptive Statistics	55
Table 5: Tally Sheet.....	56
Table 6: Mean response rates for physical and structural challenges of testing in inclusive setting.....	59
Table 7: Descriptive statistics	61
Table 8: Tally sheet.....	62
Table 9: Mean response rates of school approach related challenges of testing in inclusive setting.....	65
Table 10: Descriptive statistics	66
Table 11: Tally sheet.....	67
Table 12: Mean response rates of behaviour of teachers and learners related challenges.	70
Table 13: Descriptive Statistics	71
Table 14: Tally sheet.....	72
Table 15: Mean response rates of challenges related to national agenda for inclusivity in Kenya.....	74
Table 16: Descriptive Statistics	75

LIST OF FIGURES

Figure 1: Conceptual Framework	41
Figure 2: Academic background of the participants	48
Figure3: Years of teaching of participants.....	49
Figure 4: Mean response rates of knowledge and skills related challenges	54
Figure 5: Mean response rates of physical and structural challenges of testing in inclusive setting.....	60
Figure 6: Mean response rates of school approach related challenges of testing in inclusive setting	66
Figure7: Mean response rates of behaviour of teachers and learners related challenges ..	71
Figure 8: Mean response rates of the challenges related to national agenda for inclusivity in Kenya.....	74

ABBREVIATIONS

EFA	Education for all
KICD	Kenya institute of curriculum development
KNEC	Kenya national examinations council
LMS	Local management schools
PASW	Predictive analysis soft ware
PWD	Persons with disabilities
SENCO	Special educational needs coordinator
SNE	Special needs in education
SPSS	Statistical package for social sciences
TIQET	Total integrated quality education and training
UK	United Kingdom
UNESCO	United Nations educational scientific and cultural organization
UPE	Universal primary education
US	United State

CHAPTER ONE

1.0 Introduction

Inclusive education starts from the belief that the right to education is a basic human right and the foundation for a more just society (Forlin 1997). Inclusive education takes the education for all (EFA) agenda forward by finding and establishing schools to serve all children in their communities as part of an inclusive education system.

1.1 Back ground of the study

The quest for universal access to education has been a legitimate priority for many African governments in the post colonial period. This has been a result of several concerns, the most notable being economic development. In this regard, education for human resource development has been a big priority (Bray 1986). In the last few decades, educational provisions for learners with special needs in education have changed with more learners with special needs studying side by side in regular schools with their peers who do not have disabilities. This concept is commonly known as inclusive education. It is based on the principle that all children regardless of ability or disability have a basic right to be educated alongside their peers in their neighborhood school. This concept was implemented in western countries in 1980s and it has become a matter for the global agenda (Harding 2009).

African nations have been keen to catch up with the more developed countries in the world by supporting the inclusive education. Such nations include South Africa, Uganda, Zambia and Botswana to mention but a few (Chhabra et al 2010). Inclusive education is faced by rampant challenges. Such as hostile learning environment, lack of adaptive aids, content based training, lack of appropriate teaching and testing methodology and feeling inadequacy by teachers (Forlin 2001). Learners with special needs do not receive the expected quality testing in education from the regular schools. Currently less than 1% of people with special needs in education in Africa have access to higher education and success of this small portion of the population is limited (Forlin 2001). He also contended that, they are unable to access higher education due to barriers outside or within the institution and those within.

This study addressed the challenges facing appropriate testing in inclusive education setting in Kenya. It has been noted that most inclusive settings do not provide appropriate testing for learners with special needs in education (Harding 2009). In Kenya, according to Kenya National survey for persons with disabilities (2008), overall disability rate is 4.6. This means that there are about 1.6 million people living with disabilities, with 45% males and 45% females respectively (Government of Kenya 1999) the Kenya supreme law of land guarantees that all citizens are equal and have a right to basic education regardless of race, colour, gender, religion or disability.

In Kenya inclusive education gets shape from Koech commission of 1999. The commission was expected to make recommendations on ways that could be used to provide quality education (Republic of Kenya 1999). Based on the collected views the commission evolved the concept of Totally Integrated Quality Education and Training (TIQUET) to reflect the vision of Kenya education. It was to be total because it was expected to be inclusive, accommodative and lifelong. It was to be integrated in its view of the purpose of learning. TIQUET focused on quality of delivery and outcome of the education testing and training process. The report reiterated that, the proposed education system was to become a ticket to better life and future for the individual, community and nation (Government of Kenya 1999).

In the most regular schools in Kenya quality testing in education for learners with special education needs is not achieved. Many regular education teachers feel unprepared and fearful to work with learners with special needs in education (disabilities) in regular classes. They display frustration, anger and negative attitude towards inclusive education because they believe it could lead to low academic standards (Ross-Hill 2009). In addition to it, access to resources and specialist support affects teacher confidence and attitudes towards testing in inclusive education (Forlin 1997).

In Kenya persons with special needs in education are unable to access quality education testing due to barriers within and without the school environment. Such barriers include narrowly defined set of legibility criteria, negative attitude and inaccessible

environments. Inclusive education approach is instrumental in addressing these barriers in order to provide quality education and testing for learners with special needs and all those who are currently denied access on racial, ethnic, health, linguistic and cultural grounds (Bray 1986).

Inclusive education has a positive support from various studies, however it has a considerable criticism from those who argue that inclusion is an imprecise “one fit all” approach (Forlin 2001). Inclusive education is considered to be a “Troubled concept” because different people define it differently and poor consensus about what the term encompasses (Ross Hill 2009). Thus this has led to generation of multiple questions on how inclusive education should be implemented. Therefore teachers have resulted to general testing on the provision of testing in inclusive education setting.

Inclusion falls into the paradigm of equal opportunity and normalization. It is important to understand the foundations that underpin inclusion. The concept of inclusion was founded on the principles of normalization expounded in the seminal work by Eraclides (2001). The normalization principle underlies demands for standards, facilities and programs that support inclusive education. He also suggested that the application of normalization principle had profound implications on the public as a whole, particularly in the paradigm of social justice which includes tolerance and acceptance. Therefore there was need to carry out the study on challenges facing testing in inclusive education setting in Kenya so as to achieve the social justice.

1.2 Statement of the Problem

In Kenya most mainstream school teachers are used to teach and test regular learners. This kind of teaching and testing is taken for granted. Learners with special needs in education are not expected to be accommodated in the inclusive setting system. Many teachers are not accustomed to teaching and testing heterogeneous learners in a single classroom due to feeling of inadequacy, attitudes and lack of appropriate skills in teaching and testing. Most teachers in Kenya are not willing to teach and test learners with special needs in education (SNE) or disabilities together with regular learners

“normal learners”. The learning and school environment is not modified to accommodate and address the learners’ special needs in education. There is tendency of teachers to demonstrate no support to the learners with special needs in education in the regular classrooms, (Westwood and Graham 2003).

According to Harding and Darling (2003) the support and views of the teacher are crucial in making any significant change or a positive index in their classroom practices. They contend that the skills, knowledge and attitude acquired by the teachers about testing in inclusive education may have an effect on the ability of the teachers to adapt it. It may also have an impact on the learner’s classroom performance. This is because the most people that work together and closely with learners are the teachers (Harding & Darling 2003).The teachers do not modify the regular classroom environment so as to accommodate the learners with special needs in education (Graham 2003).The environment ought to be barrier free and accessible to all. He argues that the environment and classroom philosophy are shaped by the teacher’s competencies, attitude, beliefs, teaching and testing styles. Therefore lack of these aspects affects the success of prosperity of testing in inclusive education, thus it was vital to investigate the challenges facing testing in inclusive education setting. In this study, the researcher investigated the challenges facing testing in inclusive settings in primary schools in Kenya.

1.3 Purpose of the Study

The purpose of this study is to determine adequacy of assessment practice in inclusive education situations in Kenya.

1.4 Objectives of the Study

- To investigate knowledge and skills of testing in inclusive setting.
- To investigate physical and structure of testing in inclusive setting.
- To investigate the school approach in testing in inclusive setting.
- To investigate behaviour of teachers and learners on testing in inclusive setting.
- To investigate national policy for inclusivity on testing in inclusive setting.

1.5 Significance of the Study

This study has an invaluable significance to various educational organizations, departments, ministries and individuals. The study can be used by the policy makers to advocate appropriate government policies that address testing in inclusive education setting.

The study may also be used by the educational organizations such as Kenya Institute of curriculum development (KICD) and Kenya National Examination Council (KNEC). The Kenya Institute of curriculum development may benefit from the findings of this study in preparation and development of the school syllabuses and learning materials that meets the learner's diversities without any form of discrimination. The KICD syllabuses for primary schools ought to have learning activities based on the five categories of learning that is intellectual skills, cognitive strategies, verbal information and attitude (Clough 2000). The Kenya National Examination Council can benefit from this study by acknowledging the individual educational needs in testing especially in national examinations. The testing in regular schools need to be individualized in order to meet the special educational needs for all the learners without any form of discrimination (Whitworth 1991).

The study is also useful to teachers because they are the prime change bearers in classroom environment. The teachers may use the findings of this research to cater for all individual needs in the regular classroom through appropriate testing. The learning environment is mainly influenced by the teachers as their role remains paramount in learning and testing (Eraclides 2001).

1.6 Justification of the Study

There was need to carry out this study in that little effort has been done to fully understand the idea of inclusive education in Kenya as a matter of educational policy for learners with special needs in education (Government of Kenya 1999). Learners with special needs do not receive appropriate testing in education from the regular schools.

Recent studies shows that schools should respond to diverse needs of all children and fit themselves in children's learning styles and needs, and not vice versa (Miller 2011).

Provision of inclusive education has been supported more by developed countries than developing countries, where most of disabled persons are out of schools (Meng 2008). Despite of federal mandates to educate learners with special needs in education in the regular schools, teachers continue to generate diverse feelings about the testing in inclusive setting. Various studies have shown that teachers feel unprepared to teach and test learners with special needs in regular classrooms (Ferguson 1996). However researchers documented that teachers with skills, knowledge and positive attitudes towards inclusive education are more likely to modify their instructions, testing methods and curriculum to meet individual needs of the students and have more positive approach to testing in inclusive setting.

More over teachers who have trained on special needs education usually show a positive attitude to support testing in inclusive setting (Clough 2000). Teachers are now faced with rampant challenges with inclusion becoming a norm in today's public regular schools. This is due to lack of knowhow on how to modify the existing curriculum and environment so as to fit the needs of the learners with special needs. The success of inclusion in today's schools will depend on the prevailing efforts the teachers hold towards testing in inclusive setting (Ross Hill 2009). Teachers need to have constructive interactions with learners in classrooms which are beefed up by appropriate learning environment (Bandura 1997). The efforts applied by teachers are prone to enormous challenges thus there was need to investigate them with an aim of mitigating them since not much studies have been done on this area.

1.7 Terminologies

Education acquisition of knowledge, skills and attitude after a learning process

Inclusion is educating learner with special needs in regular schools

Inclusive education is a system which caters for the needs of a diverse range of learners and supports diversity, effectively eliminating all forms of discrimination.

Inclusive school refers to school that follows the curriculum that is prepared for the average ability learners.

Integration learning where segregation exists though learners are with their non disabled peers some of the time.

Mainstreaming integration of learners with special needs in the regular classroom setting

Special education refers to the specifically designed instructional services for learners with special needs in education

Special need refers to conditions or factors that hinder normal learning and development for individuals (barriers to learning and development).

Special needs education is education which provides appropriate modifications in curricular, teaching methods, educational resources, medium of communication or learning environment.

Special school refers to school that is built and organized to provide educational services to learners with one type of disability.

Special unit classroom located in regular school, but set aside for educating learners with specific type of disability.

Testing process of administering the test to the learner to measure the outcome of learning

CHAPTER TWO

2.0 Literature Review

2.1 Related studies

On theoretical foundation basis, researchers confirm that the notion of inclusive education is rooted in the perceived centrality of education to promote individual rights, gender equity and economic development (Wilkins & Nietfeld 2004). Most of studies support the rationale for inclusive education as stipulated on article 26(1) of the universal Declaration on human rights, which advocates provision of education for all. A reason why equity is a major concern in this provision of this education service is because education is a social good in and itself, it is important that it is equally, available to all (Bray 1986). A study by Abu- Ghaida & Klasen (2004) contended that appropriate testing in inclusive education to all learners ensures equal participation in the socio-economic and political spheres of life. According to his argument inclusive education rests on the notion that education is one of the most powerful instruments for reducing poverty and for inciting sustained economic growth.

Dr. Santhi Prakash in India carried out another study on the challenges that face testing in inclusive education setting. The study was taken in the state of Andhra Pradesh in India. The purpose of the study was to measure and compare teacher's attitudes towards the testing in inclusion of the children with special needs in schools. The method used was the use of questionnaire developed by Graham and Prock (1997). The questionnaire was measuring the three domains, effective strategies for meeting the learner's needs, support for educational change and inclusive education. The outcome of this study was that teachers use effective strategies to benefit students with disabilities. The study also showed that most teachers accept learners with special needs in education in their classrooms though burdens the teachers on testing their learning outcome. The study also outlined that inclusion is influenced by the experience of the teachers' skills, level of teaching and testing and also the management in the classroom (Dr. Santhi 2012).

Deslea konza (2002) from university of Wollongong in Australia conducted a study on "Inclusive of students with disabilities in new times, responding to challenge" the study

focused on the challenges to the implementation of a full inclusion model. In the study he examined a range of issues that confront the successful implementation of a full inclusion model. The challenges identified include socio-political climate that emphasis on examination results thus increasing bureaucratic demands on the school administrators (Forlin 1997). Mainstream schools feared being referred to as dumping ground (Graham 2003).He also focused another challenge as teacher resistance to testing as to the notion of inclusive education. According to Florien (1998), the practical implementation of inclusion places considerable pressure on individual teachers. The resistant is mainly to those with more severe intellectual disabilities and emotional or behavioral disorders (Graham and Prock 1997). They also argued that such learners need special testing in order to maximize learning in inclusive setting.

The outcome from this study is that, impact of learners with severe emotional and behavioral disorders on classrooms led to resignation of some teachers (Graham and prock 1997). While preschool teachers were more positive, perhaps, reflecting the optimism one can afford when students are young and possibilities seem endless, principals, resource teachers and psychologists are less optimistic and classroom teachers, those who face the daily responsibilities of the learners in the classroom, are at least enthusiastic about the inclusion of students with more severe disabilities (Forlin 1997).

Bartak and Fry 2004 also conducted a study on challenges facing testing in inclusive education setting. The purpose of the study was to examine the extent on which inadequate pre-service training and professional development challenge implementation of inclusive education. In their study they contended that both pre-service and in-service courses that address the skills and the attitudes of teachers towards learners with special needs are deemed insufficient by many teachers, although in-service was found in some cases to be more effective than pre-service training. There are significant information gaps between teaching practice and stated policies of educational bodies (Eraclides 2001). He also confirmed that many teachers struggle with tension between accommodating the special needs of some learners thus disadvantaging the other learners.

The outcome of this study was that some teachers believed that making any accommodation was unfair to the other learners in a regular classroom (Forlin 1997). Many teachers express their concerns about testing and assessment procedures if the curriculum has been greatly modified, and how assessment of modified material can then be judged against external assessment procedures information regarding the practical impact on learning and behavior of a specific disabilities, the extent to which support staff should be responsible for learners with special needs, best teaching practice and guidelines on permissible assessment diversities have been identified as urgent needs of teachers involved in inclusive programs. These needs are greater for teachers at the secondary level (Florien 1998).

According to Chhabra, Srivastava & Srivastava (2010) argued that some researchers focus on attitude on inclusive education, others on knowledge of teachers on inclusion while others on both the attitude and knowledge of teachers towards testing in inclusive setting. For instance, Harding and Darling (2003) conducted a qualitative research to investigate teachers' attitudes and understanding of inclusion in United States. Findings indicated that teachers had no in-service education to prepare them for testing in the inclusive setting though had positive attitude towards it. Similarly Leung and Mak (2010) in Hong Kong came to a conclusion on positive attitudes of teachers on inclusion in their study. Their findings were that most teachers in inclusive schools have basic incomplete understanding of inclusive education and believed that they needed additional training on testing to enhance effective provision of quality education to all.

2.2 Literature on the study

Inclusive education programmes for students with special needs have become increasingly prevalent in recent years with many researchers and authors focusing on diversity issues (Clough 2000). The literature review on this study focuses on definition of testing in inclusive education. It also highlights the forms of inclusive education, needs for inclusion, history of inclusive education, national policies, and inclusive education in developing and developed countries to mention but a few.

2.2.1 Inclusive education

Inclusive education in the context of education is the practice in which the learners with the special needs in education spend most of their time with non disabled ones. It starts from the belief that the right to education is a basic human right and the foundation for a more just society. Inclusive education has enabled more primary general education teachers to teach all the levels of students, some of which have learning disabilities, as well as physical disabilities. These general educators concisely struggle with personal issues concerning their own adequacy to teach and test disabled learners and their beliefs and attitudes towards the practices of inclusion (Scruggs & Mastropieri 1996).

The inclusion constructs enables regular education teachers to focus on the academic, cultural and social aspects of the disabled child in the regular classroom (Westwood & Graham 2003). Often, regular education teachers have to realign their methodologies and instructional practices to conform to where the disabled learner is academically, socially and culturally, thereby creating positive learner outcomes (Scruggs and Mastropieri 1996). They argue that through this ideology, primary general educators rely on building support and collegiality to ensure successful inclusion.

The idea of being mainstreamed into core academic classes was relegated to the disabled learners who were capable of functioning in the regular classroom with minimal accommodations from the regular education teacher (Forlin 1997). In past years, the vast majority of disabled learners usually received instructions and testing in the resource classroom which was set apart from the other regular classroom building. They only met with regular peers during lunch breaks and assemblies. An empirically research on inclusion notes that less confident primary general educators question their ability to effectively educate special needs children in regular classroom (Scruggs and Mastropieri 1996). These same teachers also question why they have to modify content driven lessons just to meet needs of these learners (Ross Hill 2009). This feeling gave rise to research addressing teachers' attitudes and how they affect the ability of teachers to carry out testing in the inclusive setting.

2.2.2 Forms of inclusive education

The hallmark of inclusive education is the child's right to participate and the school's duty to accept the child and reject the use of special schools or classrooms to separate students with disabilities from students without disabilities. A premium is placed upon the full participation by learners with disabilities and upon respect for their social, civil and educational rights (Clough 2000). He confirms that inclusive education can be classified into two forms that are regular inclusion and full inclusion.

2.2.2.1 Regular inclusion

Regular inclusion is a setting where the learners with disabilities are educated in a regular classroom for nearly all of the day or at least for more than half of the day. Whenever possible the learners receive any additional help or special instruction in the general classroom. Most specialized services are provided outside the class and the learners are pulled out for these services. The learners occasionally leaves the regular classroom to attend smaller more intensive instructional sessions in a resource room, or to receive other related services such as, speech therapy, language therapy, occupational therapy and social work. This approach can be very similar to many mainstreaming practices (Harding 2009).

2.2.2.2 Full inclusion

Full inclusion is the complete integration of the learners with special needs into the general education classroom. The learners receives all special services in the same general education classroom as all other learners, this is very common with learners whose needs are easily met in a classroom, such as a modification that allows the learner more time to complete written assignments. Here the learners are classified as disabled remain in general classrooms virtually all the time (Forlin 1997). Schools that practice full inclusion for all learners have no separate special education classroom. However, full inclusion of all learners, regardless of their particular needs is a controversial practice and it is not widely applied (Clough 2000).

According to Scruggs & Mastropieri (1996) defines full inclusion as a school setting where the learners with special needs are always educated alongside learners without special needs as the first and desired option while maintaining appropriate supports and services. It is more common for local educational agencies to provide a variety of settings, from special classrooms to mainstreaming to inclusion, and to assign learners to the system that seems most likely to help the learners achieve their individual educational goals.

2.2.3 Need for practicing inclusive education.

Inclusive education involves the process of addressing learner's needs within the mainstream schools using all the available resources in order to create opportunities to learn in preparing for life (Chhabra et al 2010). They also contend that seventy seven million children worldwide are excluded from education, a third of these are disabled more so 10% of disabled children worldwide attend school. However, inclusion is controversial and it is not widely understood or applied to date (Clough 2000). The school systems, practices and strategic plans need to adapt and change to include teaching, learning and testing strategies wider more diverse range of children and their families.

Inclusive education allows inclusion with regular children and learners with special needs by placing them together in the mainstream classes, to be taught and instructed by mainstream teachers (Bray 1986). The learners exercise their right to education in regular school of their choice in their neighbourhood without any form of discrimination. Inclusive education is considered away to create an environment that can give all learners fair access to education. This calls for a need to modify the learning and school environment to meet learners' diversities. If teaching and testing is effective and responds to both learner's diversity needs and strengths, there is a possibility for all children to learn in regular classroom (Lindsay 2003).

The learners with special needs in education are capable of fitting into an inclusive programme because they usually receive some individual support from class teachers to

help them complete their required tasks (Chhabra, Srivastava & Srivastava 2010). Therefore teachers need to have a positive attitude in order to give maximum support to such learners. Leung & Mak (2010) contends that an academic progress and success depends on how much a learner learns from the teachers, whether with or without special needs in education.

In the learning process of the learners the teacher role is paramount and very important. This is why the teachers are charged with a responsibility of imparting knowledge, skills and attitudes to the learners by modifying the learning environment to accommodate the learner's special needs in inclusive setting. According to Forlin (1997) contends that inclusion should be practiced as it is all about child's right to participate in education and the school's duty to accept the child. He also adds that inclusion rejects the use of special schools or classrooms to separate students with disabilities, upon respect for their social, civil and educational rights. He further argues that inclusive education gives students with disabilities skills they can use in and out of the classroom.

2.2.4 History of inclusive education

The history of inclusive education can be traced from 20th century with many nations striving to foster and develop education for disabled. The movement towards inclusive education for children with special needs began in the 1960s (Forlin 1997). The United Nations has made a number of influential declarations regarding inclusive education, such as the Convention against Discrimination in Education (1960), the declaration on the Rights of Disabled Persons (1975) and the Convention on the Rights of the Child (1989). In 1990, the world Conference on Education for All was held in Jomtien, Thailand. A further conference in 2000 in Senegal gave rise to the Dakar frame work for education for all, in which the international community pledged to ensure education as a right for all people, irrespective of individual differences. Subsequently in 1994 inclusive education was put forward as a concept at the Salamanca World Conference on special needs education in Spain.

The Salamanca statement is arguably the most significant international document in the field of special education (Belcher 1995). In the Salamanca statement inclusive education is described as a frame work for action that would accommodate all children “regardless of their physical, intellectual, social, emotional, linguistic or other conditions” (Salamanca Statement and frame work for action, UNESCO 1994, Article 3). This includes disadvantaged or marginalized children such as street and working children from remote or nomadic populations, children from linguistic, ethnic or cultural minorities and children with special educational needs and disabilities.

The statement argues that regular schools with an inclusive setting are the most effective way to fight against discriminatory attitudes in order to build an inclusive society and to achieve education for all (Belcher 1995). Essentially, the Salamanca Conference on special needs education gave approval to the notion of inclusive education (Bray 1986). The UNESCO international Conference in education gave approval to the notion of inclusive education (Forlin 1997). The UNESCO international conference in education was held in Geneva in 2008 and the focus of this conference was the inclusion of a more diverse range of learners, regardless of ability or characteristics, as well as the promotion of respect for the needs and abilities of learners and the elimination of all forms of discrimination (Harding 2009).

During the subsequent years, there have been considerable efforts in many countries to affect educational policy and practice towards inclusive education as is appropriate for that country (Eraclides 2001). The appropriateness of separate school system has been challenged from a human rights point of view (Ferguson 1996). In order to ensure education for all, including those children who have disabilities, it is increasingly asserted that modifying ordinary schools is the most effective way of doing this (Dr. Santhi 2012). Thus, integrated programmes take the form of special classes within ordinary schools. A problem reported by many countries that have national policies regarding integration is that there is evidence of a significant increase in the proportions of pupils being categorized as disabled as a way to earn additional resources for the schools (Clough 2000).

Dissatisfaction with 'integration' led to the concept of 'inclusive education' in many developed and developing countries. In a nut shell provision of inclusive education is anchored on the following international policies. The universal declaration of human rights-1948, the Jomtien declaration on education for all 1990, the world conference on special needs education 1994 and the Dakar frame work for action 2000. Article 26 of the universal declaration of human rights states that, "everyone has the right to education, which shall be free and compulsory. All are entitled to all the rights without discrimination of any kind such as race, colour, sex, birth or any other status" this forms an important basis for education for all children in the world regardless of their disabilities.

Another move for inclusion was during the world conference on education for all in Jomtien, Thailand. The Jomtien conference recommended among other things that all children have right to education regardless of individual differences, and also government should provide each child the most suitable education. The world conference on Special needs in education 1994 was also formulated to support provision of inclusive education. This document is also referred to as the Salamanca statement on inclusive education. The statement was formulated by representatives of 92 world governments and 25 international organizations who were the delegates of at the world conference on the special needs education in Salamanca, Spain. This was a follow up of the Jomtien Declaration (1990).

The major recommendations of Salamanca statement included, the child with special needs must have access to regular education in a welcoming school in his or her neighbourhood, this focus to create an inclusive society thus improving efficiency and cost effectiveness in education system. The policy also wanted all the governments to give priority on policy, legal and budgetary provision to improve their education system to include all children in regular education system as much as possible, the policy looked forward for non-governmental organizations to be involved in the country's programming and service delivery to strengthen their collaboration with the official national bodies and

to intensify their growing involvement in planning, implementation and evaluation of inclusive provision for special needs in education.

The Dakar framework for action (2000) is as result of the World conference on education for all that was held in Dakar in Senegal to assess the progress since Jomtien declaration in 1990. It concluded that there was little progress in most countries especially in Africa towards achieving the goals set. The conference identified some reasons for slow progress as low quality education, low completion rates irrelevant and expensive curriculum, low achievement rates, high cost of education, limited resources for financing education and low community participation.

To enhance education for all the, the following recommendations were made, the member countries to expand and improve early child care and education especially for the most vulnerable and disadvantaged children, ensure by 2015 that all children especially girls, children in difficult circumstances and those from ethnic minority groups have access to complete, free, compulsory and quality primary education, ensure the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programmes and also improve all aspects of the quality of education and ensure excellence for all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills.

2.2.5 Inclusive education in developed countries

Inclusive education programs for learners with special needs in education have become increasingly prevalent in recent decades in both developed and developing countries (Bray 1986). A country like U.S began inclusive education after the 2nd world war. One of the first organizations that supported inclusive education is American Association on Mental Deficiency, which held its first Convention in 1997. By the early 1950s, parents' organizations and civil rights groups had started to support inclusive education. This groundswell of grassroots advocacy led to the more recent history of special education in America. The data from the National Centre for educational statistics (U.S. Department of Education 2002) have indicated that during the 1998-1999 school years, a record 48%

of learner with special needs spent 80% or more of their day in a regular classroom with non disabled learners compared to 1988-1989 when only 31% of such learners did so.

The education system has been moving towards this paradigm for many years. In 1968, Lloyd Dunn called for the elimination of special classes and schools for learners with mild disabilities and endorsed more integrated service delivery models in his critique of special education (Belcher 1995). In Australia inclusive education is also advocated since education is a human right where every child or individual is entitled for provision of quality education. For instance in state of Australia, the Victoria is viewed as a strong advocate for inclusive education (Forlin 1997). Significant development in inclusive education in Victoria have included, the ministerial Report of Education services for the Disabled (1984), the Cullen-Brown Report (1993) and the blue print for government schools in Victoria (2003).

All these policy documents have emphasized the need to include learners with special needs in education into regular school programs. It is largely because of these government initiatives that there are now more than 12,000 learners with special needs in education attending regular schools compared to less than 6,000 who attend special schools (Eraclides 2001). To improve inclusive education further various studies have been conducted in other states such as Western Australia (Forlin 2001), Queensland (Whiting and Young, 1996) and New South Wales (Westwood & Graham 2003).

The British policy and legal framework for inclusive education and testing emphasizes that all children have the right to learn and play together. Children should not be devalued and discriminated against by being excluded or sent away due to their disability or special needs. There are no legitimate reasons to separate children for the duration of the schooling. Inclusive schools help to build an inclusive community, and are the means by which mainstream schools can be improved to enhance quality testing for all (Lindsay (2003). Since the early 19980's the British government has established market like system called Local Management of local schools (LMS). Under the local management schools, schools compete to attract learners with special needs in education because learners with

special needs are allocated more funding. Funding is according to the number and age of enrolled learners. Local management schools, also takes the responsibility of appointing and dismissing staff (Alghaz and Gaad 2004).

To ensure quality education and testing for learners with special needs the code of practice (1994) required mainstream schools to name a special educational needs co-ordinator (SENCO) from the staff with the responsibility such as advising fellow teachers on how to address the learning and testing needs of all learners, co-coordinating provision for learner with special needs, contributing to the in-service training of staff, maintaining schools special educational needs register and overseeing the records of all pupils with special education needs and liaising with external agencies including support agencies, medical, social services and voluntary organizations (Lindsay 2003).

2.2.6 Inclusive education in developing countries

The quest for access to education has been a legitimate priority for many African governments in the past post colonial period. This has been as a result of several concerns, the most notable being economic development (Bray 1986). The majority of the world's population of children with disabilities lives in developing countries. For instance out of a world population approximately 150 million live in Africa, Middle East, Asia, Latin America and the Caribbean (Harding and Darling 2003).

There are enormous challenges facing implementation of inclusive education in developed and developing countries despite of international declarations on regarding implementations of inclusive education. The drawbacks include feeling inadequacy on testing by the teacher, ambiguous policies on testing, inadequate funding and negative attitude to mention but a few (Harding 2009). To be specific several studies highlights diversities of drawbacks facing implementation of appropriate testing in inclusive education in developing countries. The key ones include ineffective policies and legislature, lack of relevant research information and inadequate support services (Forlin 1997). However when looking at implementing of inclusive education in various contexts, most of the developing countries have come up with different policies and

practices of inclusion. Such countries include Uganda, Nigeria, Costa- Rica, Kenya and Zambia (Leung and Mak 2010).

In Uganda the support for inclusive education is anchored in the following documents: the constitution of the republic of Uganda (1995), the white paper on Education (1992) and Universal Primary Education (UPE) policy (1997). In the constitution of the Republic of Uganda (1995) article 35 advocates for the recognition of persons with disabilities as it reads “persons with disabilities have right to respect and human dignity and the state and the society shall take appropriate measures to ensure that they realize their full mental and physical potential”. Article 30 of the same provides for their education and states that “all persons have a right to education”.

The white paper on education (1992) spells out the government’s commitment to providing primary education to all irrespective of the origin, social groups or sex. The Government particular includes among other things integration of persons with disabilities into ordinary schools. The universal primary education (UPE) policy (1997) provides opportunities to all school going age children regardless of sex or ability. It is an important step towards the fulfillment of the call for Education for All (1990). Universal Primary Education makes basic education accessible to all learners and ensures that education is affordable to all Ugandan children. The UPE emphasizes that the government should provide tuition fees for four children per family, orphan children are entitled to free tuition fees and children with any kind of the disability to be given first priority as part of the four children in the family, followed by the girl child.

In the Indian context “Inclusive education is rapidly becoming a part of official rhetoric” (Dr.Santhi 2012). He also confirms that there are approximately 55 million children who are already excluded from the mainstream education system owing to their geographical isolation social class, religion and different categories of ethnic group. At the same time, the government of Uganda is now placing children with disabilities in inclusive settings. Another developing country, Costa-Rica, is also developing inclusion with different education services models such as consulting teachers, educational assistance teams,

journeying teams and resource centers, though they have little publication in this field (Chhabra et al 2010).

The development of inclusive education in different countries is based on different socio cultural contexts. Mitchell and Desai (2009) investigated the educational systems in four different countries that is Japan, India, china and Singapore (Artiles and Dyson 2009). From these countries they observed that different approaches to inclusive education are based on the diverse cultural, political, economic and demographic factors. From their research they found that while China has a commitment to educating mild special educational needs children in regular classrooms, Japan has a more diverse policy, providing three kinds of arrangements for integrating disabled children, special classes, resource rooms and integration for individual students. Likewise, Singapore has a dual system to educate mildly and disabled children (Artiles and Dyson 2009).

It is suggested that by various researchers that developing countries also need some changes in their policies to implement inclusive education. For example, Dr. Santhi (2012) points out that it is vital to motivate people for their support, to change classroom practices and implement some pedagogical rather than structural changes in India. More over Forlin (2001) contends that developing counties such Uganda is facing similar challenges in the implementation of inclusive education. It is suggested that they also need some support regarding the scarcity of teaching and testing materials, extensive diversity, negative attitude and large class size. In addition to, Dr. Santhi (2012) suggested that the Costa-Rican government needs to establish some appropriate educational policies to guard against potential challenges, including a shortage of trained teachers in the area of inclusion. Similarly to some of these other developing countries, Kenya has tried to implement inclusive education in its mainstream education system though faced by a challenge on appropriate testing (Government of Kenya 1999).

2.2.7 Inclusive education in Kenya

According to Musumbi Nungu (2010) Kenya is among the African countries that have made notable advances in the quest for inclusive education. Major land marks in this

regard include free and compulsory education for all without any form of discrimination, increased enrolments and an attempt to democratize education governance through decentralized management. However, the road towards the full attainment of inclusion has also been marked by increasingly complex internal inefficiencies in the form of increased dropout rates, congested classrooms, shortage of trained teachers and basic facilities and a policy frame work that favors centralism over inclusivity. Equity concerns, with regard to gender, religion, and ethnicity and socio-economic background also abound (Republic of Kenya).

The Inclusive education in Kenya gets shape from Koech commission in 1999, (Kibria 2005). This commission was expected to make recommendations on ways that could be used to provide quality education (Republic of Kenya 1999). Based on the collected views the commission evolved the concept of Totally Integrated Quality Education and Training (TIQUET) to reflect the vision of Kenyan education. The TIQUET embraced the values and substance that was to characterize the education system. It was to be total because it was expected to be inclusive, accommodative and lifelong. It was to be integrated in its view of the purpose of learning. It focused on quality of delivery and outcome of the education and training process. The report reiterated that, the proposed education system was to become a ticket to better life and future for the individual, community and the nation.

As the departure from 8-4-4 system, TIQUET had some basic innovations, namely; the expansion of access to basic education, elimination of disparities in education based on geographical, social and gender factor (Kibria 2005). The education provision focused on quality education for all regardless of disabilities since education is right to everyone in Kenya. The 1983 World program of action concerning disabled persons states under article 120 that all member states agreed that education for persons with disabilities should be carried out as far as possible, within the general school system. A few years later, the 1989 convention on the human rights of the child acknowledged the special needs of children with disabilities and stated that these children must be guaranteed “effective access to education in a manner conducive to the child achieving the fullest

possible social integration and individual development” such notion was further asserted by the 1990 World declaration on the education for all, by 1993 standard rules on the equalization of opportunities for persons with disabilities were put in place (Kibria 2005).

2.2.8 Testing in inclusive education

Testing in inclusive education is a process of administering tests to learners in a regular classroom (Florien 1998). He also defines test as a tool that is used for measuring the learner’s performance in the inclusive setting. Various examples of tests administered in inclusive setting include aptitude test, personality test, psychological tests and achievement test to mention but a few. When testing in an inclusive education the teacher need to consider the following areas, the purpose of the test, reliability and validity, the population, functionality of the test and the scale of the administering (Florien 1998). He further suggests that these tests need to focus on daily living skills and self help adaptive skills so as to benefit all the learners regardless of their special needs. A good test for learners in an inclusive classroom setting should have the qualities such as reliability, validity, generalisability and fairness (Slavin 2009). He also contends that the tests need to be based on educational taxonomy which should include the levels of learning hierarchically.

Challenges facing testing in inclusive education setting can be viewed in physical as well as structural sense (Forlin 1997). But more than that, it is the curriculum, the pedagogy, the assessments and the school’s approach that creates challenges to full inclusion of the learners with the special needs. Unless these challenges are dealt with, implementation of inclusive education to all regular schools will remain a far cry (National commission on special education 2003). Dr. Santhi (2012) in his study highlighted some challenges to inclusive education setting as follows, inadequate pre-service training and professional development, large class size, insufficient curriculum resource and aid support, feeling of vulnerability, reduced teacher efficacy, time demand, lack of teacher competences , socio political climate and teacher resistance to the notion of inclusion.

According to Frances and Potter (2010) students with disabilities tend to disrupt the classroom with behaviour issues. Because they are not as cognitively developed as their peers, the teaching-learning process is not as effective as it could be. It is difficult to serve the needs of every student who is normally in the regular education class, and with the special needs students the job becomes even more of a struggle for the teacher and someone draws the short in of the stick, usually the special needs students.

Teachers have to treat special needs students differently based on standards of their learning level. Special needs students are deprived of a suitable education when they are taught at a mismatched level with students who are significantly above their level (Forlin 1997). This can negatively affect a student's sense of self-esteem and dignity. Even in physical education classes, students with physical disabilities are disadvantaged because the curriculum is not geared to include them. This can cause students with disabilities to face discrimination and bullying from their peers. Causing them to experience low self esteem, isolation, depression, and in some cases aggression (Khudorenko 2011). He also contends that these emotional breakdowns can lead to violence.

2.2.9 National policies for inclusive education in Kenya

Since independence the Kenyan government has established many education Commissions to look into sustainability of the educational provision for all children. Such commissions include the Kenya Education Commission (1964), Ominde report, the National Committee on Educational Objectives and policies (1976), Gachathi Report, the presidential Working Party on Education and Manpower training for the next Decade and Beyond (1988), Kamunge Report and Totally integrated Quality Education and Training (1999), Koech Report (Government of Kenya 1999).

The Kenya Education Commission (1964), Ominde Report advocated for integration of children with special needs in regular schools. It also advocated for teacher training to include a component of special education for regular teachers to enable the teachers to meet the needs of learners with special needs in the regular classroom. The National committee on Educational objectives and policies (1976), Gachathi Report recommended

the integration of children with special needs in the society by transferring learners with special needs in education from special schools to regular schools and other centers as much as possible.

The presidential Working Party on Education and Manpower Training for next Decade and beyond (1988), The Kamunge Report recommended that the media and national programmes be used more intensively to create public awareness of the needs of persons with disabilities (PWDs). It also suggested intersectional collaboration at the district level involving medical personnel and extension workers being trained to work with people with disabilities at the community level. The committee emphasized the strengthening of the provision of education for learners with special needs in education in the regular classroom. Totally Integrated Quality Education and Training (1999), Koech Report emphasized on the need for early intervention for children including those with disabilities and the disadvantaged, ways and means of improving accessibility, equity, relevance and quality with special attention to gender sensitivity, the disabled and the disadvantaged group, content of education at various levels with special attention to early childhood, special and primary education as well as tertiary, vocational and university education (Government of Kenya 1999).

2.2.10 Attitudes of teachers in favor of inclusive education

According to psychologist Gordon Allport in (Gordon et al 1994), attitude is an expression of favor or disfavor toward a person, place, thing or event. It is the most distinctive and indispensable concept in contemporary social psychology. Most of the researches on this concept have revealed that school teachers can have a variety of attitudes on testing in inclusive setting such as positive, neutral, negative or both. The report from these researches shows that teachers in regular schools have mixed attitudes towards testing in inclusive education (Artiles and Dyson 2009). The success of the learners with special needs in education in regular class room mainly depends on the attitudes and beliefs held by the teacher and more so self efficacy (Ross-Hill 2009). Teacher's positive attitude towards learners with special needs drives them to provide an appropriate learning and testing environment that suits all the learners regardless of their

disabilities. This can be done mainly through modification of the existing curriculum and also physical school environment (Berry 2010).

Ross- Hill (2009) points out the necessity of a positive attitude toward the practice of testing in inclusive education and toward students with disabilities. This is to overcome the belief that some teachers hold that they are not completely prepared with strategies for the successful inclusion of students with disabilities. Teachers who have favorable attitudes towards inclusion generally believe that, students with disabilities belong in general education classrooms, they can learn there and that the teachers have confidence in their abilities to teach and test them (Bery 2010).

Ross Hill (2009) argues that, accepting people as they are with their disabilities but also with their gifts and their beauty, seeing them as human persons with great value, recognizing their potential for growth rather than seeing them as a conglomeration of limitations, joining with them in relationships of mutual teaching and learning, all can lead to true community. To achieve this there is need for teachers who can provide effective instruction and testing to students with special needs in inclusive setting. Since the initiation of No Child Left Behind (NCLB United State Department of Education, 2001) students with special needs must be granted access to the regular educational curriculum. Therefore teachers in regular classroom need to have the requisite, training, knowledge and attitude towards testing, in order to handle special needs children in regular classrooms (Bery 2010).

For instance Bayliss and Burden (2000) examined the attitudes of 81 practicing UK primary and secondary school teachers towards inclusive education. Their survey found that teachers who have had experience with inclusion held more positive attitudes towards it. Similarly, in one of the few qualitative studies in the area of pre-service teachers training and inclusion, Brownlee and Carrington (2000), examined the beliefs and attitudes of Australian pre-service teachers towards people with disabilities. They found that direct contact with persons with a disability produced higher levels of comfort and more positive attitudes towards people with disabilities (Westwood and Graham

2003). In addition to it a research studies by Van Reusen et al (2001) found that secondary school teachers had a predominantly positive attitudes towards inclusive education for learners with special needs in education except learners who had physical disabilities such as visual or hearing impairments.

The results also suggested that secondary school teachers had diverse conceptualizations of inclusive education and that barriers to the success of inclusive education include insufficient knowledge, lack of training and lack of teaching and testing materials. According to Avramidis and Nowich (2002) teachers have positive attitudes towards inclusion of students with more mild disabilities. Teacher educational programmes are needed to reinforce the pre-service teachers, which are simply because some students require more effort to work with and do not necessarily mean that they are less worth being included in regular classrooms settings.

Burke and Sutherland (2004) investigated the relationship between New York pre-service teachers experience with students with disabilities and their attitudes towards testing in inclusive education. They found a statistically significant relationship between prior experience and knowledge of students with disabilities and attitude towards inclusion. Teachers and pre-service teachers with more experience and knowledge held more positive attitudes towards inclusion. While pre-service teacher education is seemingly the best point at which to try and influence positive attitudes towards testing in inclusion, studies investigating the attitudes of pre-service teachers toward testing in inclusive education remain limited in number and scope.

Various literatures reveal that inclusion has changed the way teachers perceive the classroom and students with disabilities. For example Sapon Shevin (1999) found that the inclusion of students with special needs in regular classroom motivates teachers to ensure that there is a greater match between the curriculum and instructional strategies used in the classroom to the individual needs of students. Belcher (1995) conducted a study of teachers in general and special education and administrators who attended the new Mexico council for exceptional children States conference. The study concluded that 41%

of the respondents agreed that students with disabilities could be educated and tested in regular classroom given the proper support services.

Another study that supports the idea of testing in inclusive education was conducted by Villa, Thousand, Meyers and Nevin (1996), after surveying 680 teachers in the general and special education in 32 schools in US, found that including students with special needs in education in general education results in more positive attitudes towards them by both teachers and administrators. Minke, Bear, Keemer and Griffin (1996) also conducted a survey of 493 elementary teachers in the mid- Atlantic who were teaching in integrated classrooms where both the general education and special education teachers worked together in providing instruction. Those teachers involved in an inclusive class expressed more positive attitudes toward inclusion, a greater sense of self efficacy, and felt much more confident in teaching and managing behavior than those teachers in a more traditional setting.

The participants indicated that one of the key elements necessary in a successful inclusion programme is the use of a co-teaching model where teachers in both general education and special education work jointly to provide the needed resources to all learners. Ajuwon (2008) supports inclusive education by stipulating various benefits of inclusion such as benefits include learning social skills in the environment that approximates to normal conditions of growth and development. More so children during their formative years, develop language more effectively if they are with children who speak normally and appropriately.

A qualitative case study in Botswana, findings indicated that most of teachers preferred to include the learners with mild disabling conditions compared with learners with severe to profound disability conditions. The school heads raised concerns such as inadequate training in special education, lack of resources and high student teacher ratio as barriers to successful implementation of testing inclusive education. In contrast the peers expressed high level of acceptance of learners with disabilities (Government of Botswana 1993). On support to inclusive education (Ferguson 1996) contends that often, it is

gratifying that where the school and community environments can be made physically and programmatically accessible children and youth with physical disabilities can function more effectively than would otherwise be the case. It is also apparent that such modifications to the environment often enable others who do not have disabilities to access their environment even more readily.

According to Ajuwon (2008) supporters of inclusive education use the term inclusion to refer to the commitment to educate each child to the maximum extent appropriate, in the school and classroom he/she could otherwise attend. This involves bringing the ancillary services to the child and requires only that the child will benefit from being in the class (rather than having to keep up with the other students). This is a salient aspect of inclusion, and requires a commitment to move essential resources to the child with a disability rather than placing the child in an isolated setting where services are located (Smith 2007). For the child with disability to benefit optimally from testing in inclusion, it is imperative general education teachers to be able to teach and test a wider array of children, including those with varying disabilities and collaborate and plan effectively with special educators.

Forlin (2001) conducted a study that compared four countries' attitude on testing using a questionnaire and found that teachers have positive attitude towards testing in inclusive education for children with disabilities, mainly with social emotional and behavioral disabilities. Ross-Hill (2009) also carried a study on the same and found that nine out of ten teachers thought that the regular classroom was the right place for the children with special needs in education. Similarly, Leung and Mak (2010) investigated teacher's attitude on testing in inclusion in Hong Kong by survey and found that most teachers had supportive views towards testing in inclusive education for children with disabilities.

Scruggs and Mastropieri (1996) conducted a research synthesis of empirical studies on attitudes of teachers towards testing in inclusive education. The aim of that research was to provide important information geared to development of educational policy. The focus was given to attitude of teachers toward mainstreaming and included 10,560 teachers

along other school personnel from all geographical locations of the United States and parts of New South Wales, Australia; and Montreal, Canada.

The majority of teachers surveyed believed in mainstreaming while a slight majority of teachers were willing to implement the construct in their classrooms. On the other hand an over whelming minority believed that disabled learners would be too disruptive for the mainstream classroom and therefore would demand more attention and special testing, thereby taking away the other students. Overall, support for inclusion correlated with the degree of inclusion implement and the severity of the learner's disability. The disabilities range from mild to profound. Although inclusion is seen to be valued by the majority of the teachers and educators, the positive attitude by teachers on testing in inclusive education is the paramount factor to lead it to success (Scuggs and Mastrieri 1996).

From the range of studies discussed above, most researchers reported that teachers posses positive attitudes or views on testing in inclusive education (Ross-Hill 2009). If teachers have positive views on inclusive education, then they will value all the children without any form of discrimination, with their needs and interact with them accordingly (Forlin 1997). The above discussion confirms that the attitudes of teachers in implementation of inclusive education are paramount fundamentals for success of learners and thus there was need to investigate the attitude of teachers on inclusive education as a challenge towards testing. The overall attitudes and thoughts of teachers play a pivotal role in addressing the learner's performance (Bandura 1997). In his theory of social cognitive theory he outlines that attitudes evolves from previous achievements, successes and failures, from persuasions of others and from one's own psychological state.

2.2.11 Attitudes of teachers in disfavor of inclusive education

On the other hand provision of education for learners with disabilities in regular classroom has faced criticism from various researchers. For instance Ogbue (1995) reported on interview conducted in Lagos state on the issue of inclusion of special need children in general education classroom. Her findings were that out of the 200 regular

primary school teachers interviewed 60% of them rejected inclusion, while 35% of them would want inclusion provided that there were adequately trained teachers on testing in inclusion. The remaining 5% were undecided on the issue.

A study finding by Kauffman and Hallahan (1995) suggests that although combining special education and general education looks appealing on the surface, this practice may create unfair burden on the system to meet the needs of all students especially on testing. Similarly Tylor and Harrington (1998) echo this view. They state that critics of inclusion contends that placing students with disabilities in regular education classes create a burden on teachers in general education, to educate those students and does not provide a setting where the students can receive individualized instruction and testing.

In a study conducted by D'Alonzo, Giordano and Cross (1995), teachers cried out several challenges of testing in inclusive education. They argued that the instructional strategies used by teachers in traditional setting might not be effective. In addition to teachers noted that many programmes lacked adequate funding and the staff was not properly trained to work with students with disabilities (Kauffman 1995). He indicated that the most common resistance to inclusion is the belief by teachers that they lack the skills needed to teach and test a child with disabilities. The effectiveness of testing in inclusion may be influenced by the attitudes of the school personnel who are directly involved in provision of education. He also found that the majority of teachers are not fully receptive to testing in inclusion because they did not know how to differentiate instruction or what kind of support to provide to the children with special needs in education.

Similarly a study by Avramidis et al (2000) contends that regular school teacher attitudes on testing reflected lack of confidence in their own instructional skills, testing skills and quality of support personnel available to them. More over the teachers had a positive attitude about integrating only those whose disabilities were not likely to require extra instructional or management skills from the teacher.

Mainstream teachers view the philosophy of testing in inclusive education as an exciting challenge, the stress associated with its introduction being seen as life sustaining enjoyable and beneficial (Berry 2010). On the other hand it has been noted that the experience of being an inclusive educator is challenging enough to cause teachers to become physiologically and psychologically stressed (Whiting and Young 1996). They also found that inclusion was an impossible obstacle for some teachers, however others have seen it as an opportunity for personal professional growth while contributing to the dynamic field of education. It would appear that the attitudes of educators toward the inclusion of students with special needs are multidimensional and complex. Positive attitudes are considered to encourage the inclusion of students with disabilities into regular classrooms, while negative attitudes support low achievement and poor acceptance of students with disabilities into inclusive settings (Beattie et al 1997).

While some studies point out that teachers attitudes towards testing in inclusive education are typically positive (Aviravidis et al 2000) other studies reveal that teachers attitudes may be influenced by the disquiet they experience regarding the impact such as a process will have on their time and skills on testing. They also note that teachers may resist inclusive practices on account of inadequate training on testing. It would appear that teachers perceive themselves as unprepared for inclusive education because they lack appropriate training in this area. Bender (1995) contends that inadequate training relating to testing in inclusive education may result in lowered teacher confidence as they plan for inclusive education. Teachers who have not undertaken training regarding testing in the inclusion of students with disabilities rarely support the inclusion (Van Reusen et al 2001). He also confirms that training in the field of special education appears to enhance understanding and improve skills regarding testing in inclusive setting.

Mostert et al (2002) and Naanda (2005) as cited in Engelbrecht et al (2007) investigated the factors influencing successful implementation of testing in inclusive education in Namibia found that the attitudes of the teachers in Namibia towards testing the learners with disabilities were not favorable. The magnitude of disabling conditions was found to be the main factor, which influenced teachers' attitudes towards testing the learners with

disabilities. Some teachers stated the opinion that the responsibility for teaching the learners with disabilities lies with special educators in special schools. Naanda (2005) recommended that teacher preparation at all levels (early childhood to secondary) should be oriented toward testing. This kind of training was viewed as one way of facilitating learning and testing for all learners and eliminating negative attitudes towards testing learners with disabilities in inclusive setting.

Similarly Johnstone (2007) in (Berry 2010) employed a multi-method case study to explore the challenges of testing in inclusive education in Lesotho. The teachers' attitudes towards students with disabilities were favorable, but they did not make instructional adjustments to meet the learning needs of the students with disabilities. In Zimbabwe researchers have embarked on studies about the attitudes of Zimbabwe's school personnel toward testing in inclusion of learners with disabilities in regular schools. The findings of these studies reported negative attitudes of teachers towards testing in inclusion of such learners in general education classrooms. Principals of schools were found to show more favorable attitudes towards students with disabilities than was shown by the classroom teachers (Mpfu 2003).

2.2.12 Factors that influence attitudes of teachers towards testing in inclusive education

Various studies have outlined various factors that may influence the attitudes of teachers toward testing in inclusive education. From these researches not all teachers' attitudes are positive toward testing in inclusive education. The factors include the size of the class for the learners with special needs (Harding 2009). He argues that the large class size of learners with disabilities is seen as a barrier to successful testing in inclusive education. In the regular class the teacher needs develop objectives for testing the learner based on the individual diversities. This may over burden the teacher in attempt to address the needs of all the learners (Van Reusen et al 2001). According to (Scruggs and Mastopieri 1996) Italian inclusive class does not exceed twenty learners. This has resulted to better support of testing in inclusive education for learners with special needs in education.

Secondly the training of the teachers on testing influences the attitudes of teachers toward inclusive education. Teachers who are trained on special needs education have positive attitudes toward testing in the inclusive education compared to the counter parts that are not trained on the same (Harding and Darling 2003). Moreover teachers' attitudes toward testing in inclusive education are influenced by training of the teachers in special needs education. It would appear that teachers perceive themselves as unprepared for testing in inclusive education due to lack of appropriate training on testing in the key area of concern. Inadequate training on testing in inclusive education may lower the teachers' self esteem and confidence as they deal with learners with special needs in education (Van Reusen et al 2001).

The attitudes of the teachers towards testing in inclusive setting are influenced by the gender (Leyser and Tappendorf 2001) on their study on investigation of teachers' attitudes toward testing in inclusion of learners with special needs into mainstream found that female teachers are inclined to have more favorable attitudes. They also have higher expectations of students with special needs than men. On the other hand studies outline that men have more positive attitude toward learners with disabilities in inclusive setting than female. Findings linking gender as a variable to investigate reactions to inclusion are often linked to cultural factors with some cultures ascribing the care of learners with special needs to female teachers. There is no correlation between a teacher's gender and their attitude toward testing in inclusive education (Avramidis et al 2000).

The degree of disability may influence attitude of teachers toward testing in inclusive education. The regular class appears to be shaped by the degree or the severity of disability. The disability can be classified as mild, severe or profound (Forlin 2001). There is great concern on the inclusion of the learners with several disabilities by the teachers on the regular classrooms. They view the shift to include learners with multiple disabilities into regular schools as impossible and impractical. The attitudes of teachers seem to be less favorable about including students with many and physical disabilities into mainstream. The learners with emotional and behavioral disorders attract the least positive attitudes from the teachers within regular classes (Avramidis et al 2002).

2.2.13 Teacher expectations

The word expectation in this context refers to a primarily cognitively derived prediction (Clough 2000). He contends that these are cognitive inferential judgments that teachers make about their learners' present and future academic achievement and general classroom behavior. Normally the teacher's expectations are found in part upon available data such as intelligent quotient and achievement test data, grades, and information given by the other teachers or even knowledge about the student's family. Ross-Hill (2009) confirms that teachers' expectations can affect the learners learning performance or outcome by affecting the teacher-learner interactions within a learning environment.

There is need to find out to what expectations and attitudes do primary school teachers possess towards testing in the inclusive education. This will provide an extremely valuable data about the influence of inclusion on their instructional behavior in regular classroom. Clough (2000) also argues that teacher expectations are normal, ubiquitously present, usually accurate and shaped and changed by observation and contact with learners in the classroom. Moreover expectations usually result from observed performance rather than cause it. The potential for self fulfilling prophecy is greatly increased when teacher expectations are inaccurate and inflexible (Forlin 2001).

2.2.14 Barriers to testing in inclusive education

There are various drawbacks that hinder the practice of testing in inclusive education. Many regular schools may not be able to effectively accommodate learners with various diversities of learning needs as follows, negative attitudes of teachers and other stakeholders in many African countries many communities, disabilities are explained to be results from God's punishment for some wrongs done to the ancestors or some person's problems. As such any child experiencing any of these conditions is seen as a curse or possessed by any spirits (Slavin 2009). Such superstitions have led many parents who give birth to children who deviate from the 'normal' to hide the children hence deny them access to education. Some communities also possess stereotype behaviors or beliefs such as that a mother who gets baby with albinism has been adulterous, if a pregnant woman looks at a crippled person she will get a crippled baby. Such stereotype behaviors have

led to discrimination and undermining of learners with special needs in education. Thus undermine implementation of inclusive education in many regular schools (Leung Mak 2010).

Special needs education has been mystified by the belief that it is very special and only for special teachers trained in special institution (Forlin 1997). He also contends that such teachers are considered capable of working in a special school with a special child using special equipment. This has led to even the school inspectors and other education officers avoiding to carry out inspection in special education programmes as they do not understand the special world. The regular teacher may refer the learner with special needs to the special school or unit, hence denying the learner the chance to learn in the natural setting in the neighbourhood.

Forlin (1997) contends that the charity model to disability and special needs provision has also led the community and other stake holders to leave education of learners with special needs as a responsibility of churches and voluntary organizations. This makes the learners develop a sense of dependence and does not equip them with a lifelong education to exist independently in the world after school. Similarly some school administrators and policy makers in education feel that it is improper to 'waste' time scarce resources on learners with special needs while the 'normal' ones do not have enough, hence unsupportive to any more inclusion of such learners in the mainstream school. Moreover some teachers usually have objection having learners with special needs in their class or school fearing that the child will lower the mean score for their class or school. This is because of the exam oriented nature of our education system, which is one of the major barriers to inclusive education (Artiles and Dyson 2009).

According to Koech Repot (1999) the Kenyan curriculum is inappropriate for learners with special needs in education in that, it lacks clear policy guidelines and legal status on testing special needs education provisions. It fails to address the specific subjects that would cater for special needs of learners for lifelong education. The curriculum is rigid and only can meet the needs of the average learners and lacks adequate educational

facilities, equipment and services for testing children with disabilities. The curriculum suffers unfriendly learning and testing environment for the learners with special needs in education this results to classroom repetition and sometimes desertion.

2.3 Theories of inclusive Education

The educational philosophy of inclusive education has been enshrined on the various theories. Such theories include social learning theory, observational learning theory and guided learning theory.

2.3.1 Social learning theory

Social learning theory is one of the theories that provide a back up of inclusive education. This theory was developed by Albert Bandura. The theory states that learning both cognitive and behavioral, takes place through the observation, modeling and imitation of the other persons (Ntshangase, Mdikana and Cronk 2008). He also argues that within the school setting all the learners are expected to learn academic concepts as well as behavior skills, since these two concepts are a challenge to learners with special needs more over they can develop low self esteem issues which hinder them socially. Due to histories of poor and low performance of the learners with special needs at school, are likely to feel as though academic outcomes are beyond their control, thus perceiving themselves as low achievers. Thus it is important that academic content and social skills be addressed within the regular classroom.

The main characteristics of social learning theory are a self-efficacy, agency, centrality observation learning, a casual model that involves an environment-person-behavior system and cognitive contributions (Miller 2011). Inclusive education anchors on this theory in that disabled peers can observe their non disabled peers and their teachers and then imitate them both behaviorally and academically. Miller (2011) contends that social learning theory combined with Freudian learning principles focus on teaching children important real-life social behaviors. From various researchers who advocates for inclusion, thought that students with special needs in education would benefit much from

the community that is less restrictive as they interact with peers and teachers to develop friendship.

In inclusive classroom the learners with special needs have an opportunity to learn acceptable behaviors by observing their peers and social interactions. This can improve their academic performance as their motivation is also boosted in the learning community. This enables them to learn through cooperative learning as it involves social interactions amongst the learners. This insight ties into the Freudian theory of identification through observation of learned behaviors of the peers. This identification concept was further expanded by Bandura and Walter, through modeling that new behavior can also be acquired through observation.

2.3.2 Observation learning theory

The observation learning theory emphasizes the learning mainly through observing the target behavior and modeling the desired performance. Learners with special needs in education can learn academic behaviors from peers and the community through observation as they interact in the regular schools. Children can be the best teachers as they enhance cooperative learning. This involves social interaction among them and it is the key to the educational thinkers like Piaget and Vygotsky cited in (Slavin 2009).

Through the use of interaction and active expenses in the learning helps children to feed knowledge to one another. The two methods have an advantage that social communication skills that children needs as adults are inculcated. On the other hand learners with special needs can also offer educational knowledge to their peers. The learners with special needs would feel proud, responsible and a sense of belonging if they realize that, they can teach others and others can learn from them, learners can acquire knowledge through constructive discussions in groups where new ideas are learnt thus improving their academic performance peer learning helps the learners to build effective listening and communication skills (Harding 2009).

2.3.3 Guided learning theory

Guided learning theory has its orientation on the zone of proximal development. This theory has an implication for inclusive education in inclusive classrooms. The zone of the proximal development states that students learn when guided by an adult or when working with more capable peers (Slavin 2009). “A more competent person collaborates with a child with special needs to help him move from where he is now to where he can be with help. This person accomplishes this feat by means of prompts, clues, modeling, explanation, leading questions, discussion, joint participation, encouragement and control of the child’s attention” (Miller 2011). Learners with disabilities can learn from their peers without disabilities as well as with the support of adult guidance to gain a better understanding of the concept being taught. For example, peer tutoring has been found to be effective for students with disabilities (Mc Duffie, Mastropieri and Scruggs 2009).

2.3.4 Planned behavior theory

This study will also be guided by Ajzen's theory of planned behavior, an extension of the theory of reasoned action (Ajzen 1991). This is a widely used model to determine behavior arising from attitudes and has been used in research involving attitudes toward individuals with special needs in education. Assumptions derived from the theory are that theoretical variables of behavioral intention, that is, attitude toward the behavior, the subjective norm and perceived behavior control, should come together to estimate intention. His model suggests that attitudes toward a behavior may be influenced by past experiences, previous knowledge and newly acquired knowledge. He further contends that attitudes play a significant role in determining behavior and it is therefore important to ascertain the factors shaping inclusion of learners with disabilities.

More specifically, this study is based on the premise that the attitudes of mainstream teachers toward testing the learners with disabilities are influenced by past experiences (previous experience with teaching and testing students with disabilities, previous knowledge (training in the field of inclusive education) and newly acquired knowledge (professional development or training modules) (Ajzen 1991). The guided learning theory, planned behavior theory and observation learning theory in conjunction with social

learning theory should theoretically help the researcher to explain how the learners with special needs in education progress academically and increase appropriate social interactions in an inclusive educational setting. The three theories describe how learning occurs in the classroom through socially and academically. High social interaction is important for learner's academic achievement and also for their long term general well being and personal development (Ntshangase, Mdikana and Cronk 2008).

2.4 Conceptual Framework

Inclusive education is a model where both disabled and non disabled learners are educated within the same classroom environment. It is anchored on the various theories such as social learning theory and planned behavior theory. These theories were used in this study to support the arguments of the researcher. The social learning theory was developed by Albert Bandura and states that learning is both cognitive and behavioral, that takes place through observation, modeling and imitation (Ntshangase,mdikana and cronk 2008).The planned behavior theory was developed by Ajzen. It was used to determine behaviors arising from attitudes. Assumptions derived from this theory are that theoretical variables of behavioral intentions, that is, attitude toward the behavior, the subjective norm and perceived behavior control, should come together to estimate intention. The model suggests that attitude towards a behavior may be influenced by past experiences, previous knowledge and newly acquired knowledge (Azjen 1991).

The assumptions derived from the two theories are that all persons have potential to develop a target behavior. Thus all learners can learn regardless of their special needs and diversities. This has lead to inclusion of learners with special needs in regular schools. Testing in such schools is not appropriately done thus there was need to carry out this study on challenges that are facing it. The study involved the use of questionnaires to collect data on challenges facing testing in inclusive setting based on, knowledge and skills in inclusive education, physical and structure of inclusive setting, the school approach behaviour components of teachers and learners and national agenda for inclusivity in Kenya.

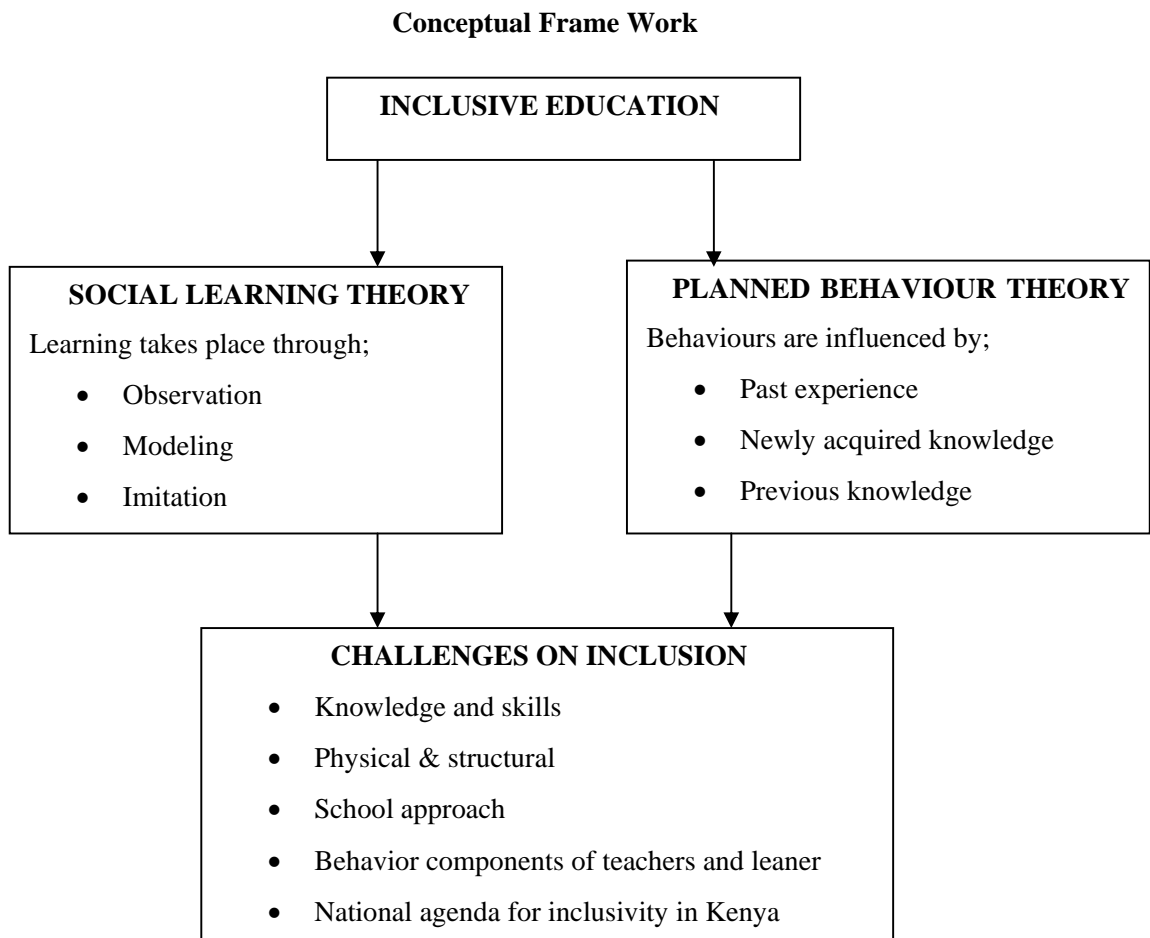


Figure 1: Conceptual Framework

Summary

The quest for universal access to education has been a legitimate priority for many African governments in the post colonial period. This has been a result of several concerns, the most notable being economic development and in this regard, education for human resource development has been a big priority (Bray 1986). Therefore educating children with special needs in inclusive setting ensures their equal participation in the socio economic and political spheres of life (Berry 2010).

The provision of education to all people in an inclusive setting has been a practice of developed and developing countries. The leading provider being the developed countries due to their economic status and more so positive attitude to support all children regardless their diversity needs (Ross-Hill 2009). The government of Kenya is also putting some initiatives in favor of inclusive education in all public schools. The government of Kenya also recognizes the paramount role of teachers in provision of testing in education in inclusive settings. However implementation of inclusive education has not been fully achieved due to various challenges such as inadequate funds, inappropriate educational resources, lack barrier free environment, negative attitudes of teachers and lack of well trained personnel to mention but a few. Thus there was need to investigate challenges towards testing in inclusive education so as to mitigate them.

CHAPTER THREE

3.0 Methodology

3.1 Introduction

This chapter provides a description of the educational research and presents the research design and methodology used in this study. This study has a very significant position in testing in inclusive education provision as education study is based on some ways of thinking and certain methods of establishing skills, beliefs and knowledge (Eraclides 2001). According to Babbie (1990) many researchers use three lenses for educational research that is, quantitative, qualitative and mixed design of research.

This chapter describes the data collection procedures, the research procedures and the method of sampling that was used by the researcher to select the research participants. The questionnaires that were used to collect quantitative and qualitative data are also explained in this chapter. This chapter also highlights the discussions of the ethical considerations and some of the problems encountered during data collection process. The chapter is marked by a conclusion that forms a summary of the process of research carried out on challenges that face testing in inclusive setting.

3.2 Research design

In this research project the researcher collected the data systematically, accurately and organized it to facilitate its analysis. The researcher used mixed analysis approach. Mixed analysis uses both the quantitative and qualitative techniques within the same frame work (LeCompte Preisse 1993). The researcher used descriptive approach to turn the data on the questionnaires into numbers according to five point scale with a rage of 1- 5 (Likert scale). The data was presented on tables and graphs for easier interpretation. According to Babbie 1990) a research literature should have a clear research design. Lack of this may lead to a difficult in replicating the research.

3.3 Target population

The target population for this study was the teachers working in regular public primary schools or mainstreams where inclusive education was practiced. From the population, 40 teachers including head teachers from eight public primary schools were selected through purposeful sampling in order to participate in the research. Purposeful sampling technique refers to the process by which researcher selects a sample basing on the experience or knowledge of the group to be sampled (Patton 2011). In the study the researcher mainly focused to collect data from teachers with knowledge, skills and experience in inclusive education setting.

3.4 Sample size and sampling procedures

The participants of this study were drawn from teachers working in regular public primary schools in Thika East Sub County in Murang'a County. The sampling plan suggested by Krathwohl (1998) directed the process of selecting the 40 participants for the study. A sampling frame was constructed by obtaining a list of schools and a number of primary school teachers in the Sub County. The participant number was obtained through the help of the head teachers of the selected target schools. The schools in the Sub County comprise of the general education teachers and special needs education teachers.

Due to privacy and confidentiality regulations, it was difficult to obtain the names of teachers at individual schools. A table of purposeful sampling was used to select eight schools from an alphabetical list providing an equal chance to any school in the Sub County as emphasized by Krathwohl (1998). Using the established sampling frame, numbers were assigned to each school. Numbers were then selected based on purposeful sampling, producing a potential list for the representative sample (Patton 2001). Eight schools were selected from the list. A consent letter and questionnaires were delivered to the selected schools by hand delivery. The head teachers of the target schools were asked to distribute the questionnaires to five teachers including head teacher in each school to fill in. The prevalence was given to teachers who had knowledge and experience with special needs learners in inclusive setting.

3.5 Data collection instruments

The method of collecting data that was used in this research is quantitative and qualitative. The researcher mainly used the descriptive approach to gather data from 40 teachers including head teachers from 8 public regular primary schools in Thika East Sub County in Murang'a County using survey questionnaires. The qualitative data approach was used in collection of demographic data for the research participants. The researcher mainly relayed on survey method as it is acknowledged that survey method of data collection can stand alone as a design (LeCompte and Preisse 1993) According to Best and Kahn (1998) contends that a research literature should need a clear data collection instrument in order to keep focus of the study.

3.6 Data analysis and interpretation

The researcher created a data code book which contained information on all the variables. Data entry screens was designed based on the questions in the data collection instrument using the statistical package for social sciences (SPSS) version 21 which was renamed the Predictive Analysis Soft Ware (PASW) earlier in the year 2009. The researcher used descriptive approach to turn the data on the questionnaires into numbers according to five point scale with a range of 1- 5 (Likert scale). The data was presented on tables and graphs for easier interpretation.

3.7 Ethics during the research

According to Best and Kahn (1998) an educational researcher needs to have professional and personal integrity. In this research the researcher got an informed consent from university of Nairobi and ministry of education to carry out the research in Thika East Sub County in Murang'a County. More over the researcher protected the participants' right by informing them their role in the study and by maintaining confidentiality during the research process. To achieve confidentiality the researcher informed the participants that the data was not to be disclosed to anyone and the names of the researchers were not to be included in the questionnaires. The researcher also informed the participants of their rights to withdraw from the research process at any time if need be. The researcher also

requested for permission from the head teachers of the target schools so as to collect the data from the teachers.

3.8 Problems to be encountered during the research

The researcher encountered the following problems during the research, transport constrains due to few public vehicles and rough roads, difficult in identifying regular schools that practice inclusion with teachers trained in special needs, financial constrains since the research was self sponsored, more so the researcher experienced the geographical terrain problem since most of the schools in the target Sub County are sparsely distributed.

Summary

The researcher collected all the filled questionnaires and started preparing to analyze the data. The researcher used the descriptive and interpretive approaches to analyze the data. Any data collected accounted for the findings and the information from the questionnaires was treated with personal professional ethics and decorum. The data collected was used to draw a conclusion and give a way forward for mitigating the challenges facing testing of learner with special needs in regular primary schools. The findings are very useful for educators and teachers towards support of learners with special needs in education.

CHAPTER FOUR

4.0 Data analysis and presentation

4.1 Introduction

This chapter presents the results of the study of the challenges that face testing of the learners with special needs in an inclusive setting. The study findings are presented in four sections based on the objectives of the study. The purpose of this study was to determine adequacy of assessment practice in inclusive education situations in Kenya and extend the current research base on testing in inclusive education setting. More over to further delineate the challenges facing testing in an inclusive setting. The prime focus was to support the learners with special needs in education in the regular schools of their own choice in their neighbourhood in Kenya.

4.2 Response rate

The study involved 40 participants who filled in the questionnaires. The sample involved 20 males and 20 females. The respondents were selected from 8 public primary schools in Thika East Sub County in Murang'a County. They filled the 40 questionnaires which were then returned to the researcher. Therefore, 40 usable questionnaires were obtained from the participants for data analysis, yielding an overall 100% response rate.

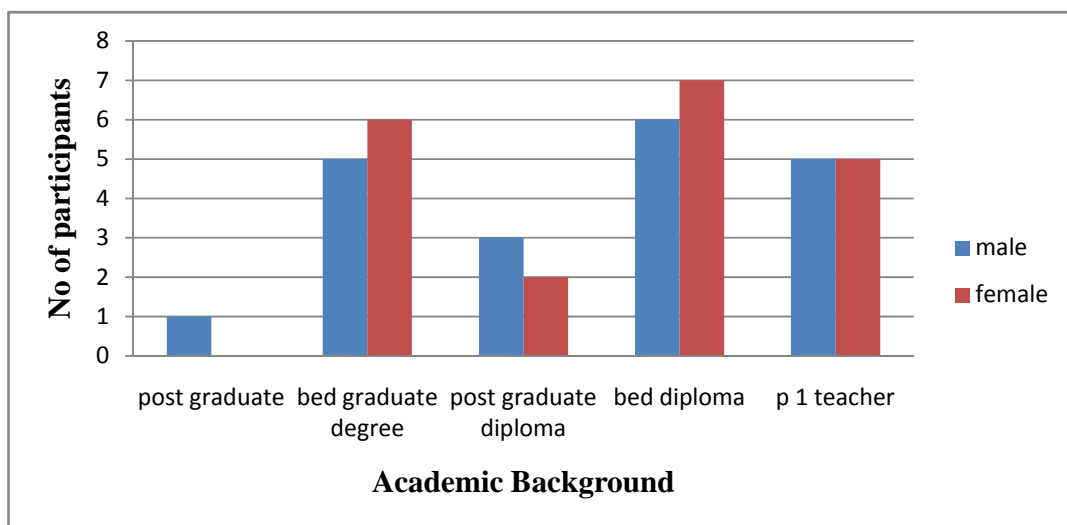
4.2.1 Demographic variables of the participants

Table 1: Demographic characteristics of the participants

Characteristics of participants	Male (%)	Female (%)	Total (N=40)
Designation			
Head teacher	5 (12.5%)	3 (7.5%)	8
Teacher	18 (45%)	14(35%)	32
Academic background			
Post graduate degree	1(2.5%)	0(0%)	1
Bed graduate degree	5(12.5%)	6(15%)	11
Post graduate diploma	3(7.5%)	2(5%)	5
Bed diploma	6(15%)	7(17.5%)	13
P 1 teacher	5(12.5%)	5(12.5%)	10
Years of teaching			
0 ___ 5	2(5%)	3(7.5%)	5
6 ___ 10	6(15%)	1(2.5%)	7
11 ___ 15	1(2.5%)	1(2.5%)	2
16 ___ 20	4(10%)	8(20%)	12
21 ___ 25	3(7.5%)	2(5%)	5
26 ___ 30	3(7.5%)	3(7.5%)	6
31 ___ 35	1(2.5%)	2(5%)	3

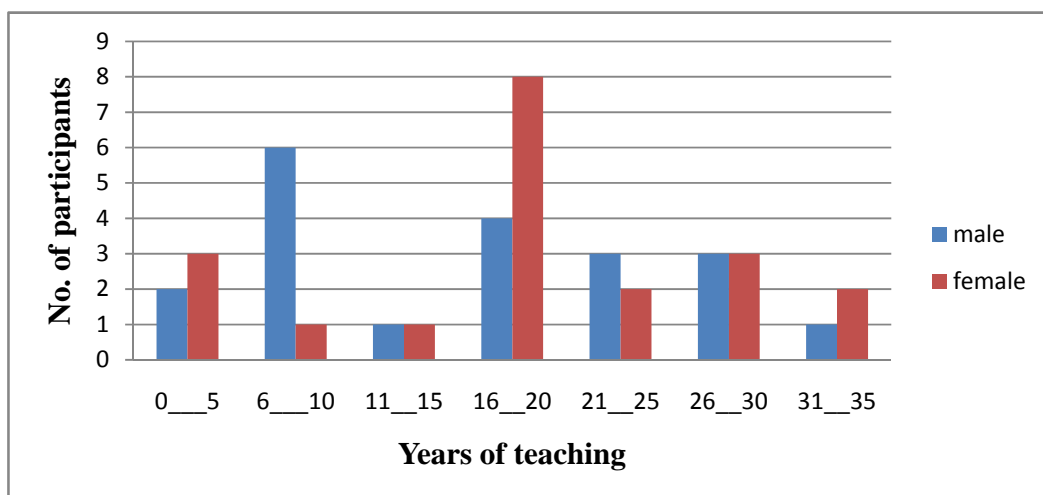
The table 1 above shows demographic variables of the participants of this study. It comprise of the characteristics of the participants in terms of gender, designation, academic back ground and years of teaching.

Figure 2: Academic background of the participants



The Figure 2 shows the academic back ground of participants for the study on challenges that face testing of learners with special needs in inclusive setting. The highest number of participants comprise of teachers who had a diploma in education which was 32.5% of the participants (15% male and 17.5% female). This is followed by the number of teachers who had a bachelor degree in education, which is 27.5% (12.5% male and 15% female). The minimum number of participants had a post graduate degree in education, which is 2.5 % of the participants. Other participants comprise of post graduate diploma with 12.5 % (7.5% male and 5% female) and p 1 teacher with 25% (12.5% male and 12.5% female).

Figure3: Years of teaching of participants



The Figure 3 above represents the years of teaching of the participants. The most participants' years of teaching were between 16 and 20 years. This translates to 30% of the participants (10% male and 20% female). The minimum number of participants had years of experience falling within 11 and 15 years which was 2.5% male and 2.5% female of participants.

4.2.2 Knowledge and skills related challenges in testing in inclusive setting

Table 2: Tally Sheet

Issues	Strongly Disagree (%)		Disagree (%)		Undecided (%)		Agree (%)		Strongly agree (%)	
	M	F	M	F	M	F	M	F	M	F
a)Teachers should be trained in inclusive education	1 (2.5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	7 (17.5)	9 (22.5)	12 (30)	11 (27.5)
b)Teachers use variety of tests for SNE	0 (0)	4 (10)	10 (25)	5 (12.5)	1 (2.5)	1 (2.5)	8 (20)	7 (17.5)	1 (2.5)	3 (7.5)
c)Teachers prepare tests based on blooms taxonomy for SNE	2 (5)	3 (7.5)	11 (27.5)	11 (27.5)	0 (0)	1 (2.5)	6 (15)	2 (5)	1 (2.5)	3 (7.5)
d)Preparation of valid and reliable tests	2 (5)	4 (10)	4 (10)	8 (20)	4 (10)	2 (5)	7 (17.5)	4 (10)	3 (7.5)	2 (5)
e)Fairness in testing SNE learners	1 (2.5)	8 (20)	12 (30)	5 (12.5)	2 (5)	1 (2.5)	4 (10)	6 (15)	1 (2.5)	0 (0)
f)Use of self-help tests for SNE learners	2 (5)	7 (17.5)	6 (15)	8 (20)	4 (10)	1 (2.5)	7 (17.5)	3 (7.5)	1 (2.5)	1 (2.5)
g)use of daily living skills test for SNE learners	1 (2.5)	11 (27.5)	8 (20)	5 (12.5)	3 (7.5)	0 (0)	7 (17.5)	2 (5)	1 (2.5)	2 (5)
h)Diagnostic tests are used to tests SNE learners	1 (2.5)	6 (15)	8 (20)	4 (10)	3 (7.5)	1 (2.5)	7 (17.5)	6 (15)	1 (2.5)	3 (7.5)
i)Teachers use aptitude tests to identify talents	3 (7.5)	4 (10)	4 (10)	5 (12.5)	6 (15)	4 (10)	7 (17.5)	3 (7.5)	0 (0)	4 (10)
j)Use of achievement tests to test SNE learners	2 (5)	2 (5)	3 (7.5)	6 (15)	3 (7.5)	0 (0)	6 (15)	8 (20)	6 (15)	4 (10)

The responses on table 2 were based on the first objective of the study that addressed the skills and knowledge related challenges. The table shows the number of responses of the participants with their respective percentages. From the study it was found out that 97.5 % of participants were for the view that teachers in regular schools should be trained in special needs in education. This was in fully agreement with Chhabra et al (2010). Who contended that inclusive settings are faced by rampant challenges among them was lack of trained teachers in special needs education. However 2.5 % of the participants were of a contrary opinion.

On responding to the use of various tests to test learners with special needs in regular classrooms 47.5% of participants were of the opinion that teachers do not use a variety of tests on learners with special needs. However 47.5% of the participants were of a contrary opinion whereas 5% were undecided. More over on responding to the statement that teachers prepare tests for the learners with special needs based on the learning theme, purpose and bloom's taxonomy 67% of the participants were not of that opinion. This was in agreement with the views of Forlin (2001). Who argued that many tests used in most regular schools are not prepared based on the learning levels. However 30% of participants were of a contrary opinion while 2.5% were undecided.

The study also revealed that 45% of participants were of the opinion that teachers in regular schools do not prepare valid and reliable tests for testing learners in inclusive settings. This was in agreement with Graham and West wood (2003). In their study on challenges that face inclusive education highlighted that most teachers do not use appropriate tests for learner's diverse learning needs. However 40% of the participants were of a contrary opinion while 15% were undecided. This shows that there was inappropriate testing in inclusive settings. On responding to the existence of fairness in testing learners with special needs in inclusive settings 65% of the participants were of the opinion that testing in regular schools lacks fairness. This was in fully agreement with Forlin (2001). In his study he argued that testing of learners with special needs in common classrooms with non disabled disadvantages the disabled as their abilities vary.

On the other hand 27.5 % of the participants were of a contrary opinion while 7.5% of participants were undecided.

The results of this study also revealed that 57.5% of participants were of the view that teachers in regular schools do not use self help tests to the learners with disabilities. This was in agreement with Slavin (2009) who argued that self help test are rarely used in most regular schools as they consume more time. However 30% of participants were of a contrary opinion whereas 12.5% were undecided. The study further revealed that 62.5 % of the participants were of the opinion that teachers in inclusive settings do not administer tests for the daily living skills to the learners with mental disabilities. This fully agreed with findings of Bray (1986). However 30% of the participants were of a contrary opinion whereas 7.5% were undecided. On responding to the use of diagnostic tests 47.5% of the participants were of the view that teachers in regular schools do not use diagnostic tests to identify learners with special needs.

On the other hand 42.5% of the participants were of a contrary opinion while 10% were undecided. More over the results in the study revealed that 40% of the participants were of the view that teachers in regular schools do not use aptitude tests to identify talents of the learners with disabilities. This concurred with the findings of Artiles and Dyson (2009). However 30% of the participants were of a contrary opinion while 25% were undecided. The study further revealed that 60% of the participants were of the view that achievement tests are mainly used in regular schools to reflect performance of learners with disabilities. This agreed with Forlin (1997) who argued that over dependence on achievement test do not focus on whole performance though relayed by most teachers in regular schools. However 32.5% of the participants were of a contrary opinion while 7.5% were undecided. This confirmed that there was over dependence on achievement tests in measuring the learner's performance in inclusive settings.

Table 3: Mean response rates of knowledge and skills related challenges in inclusive setting

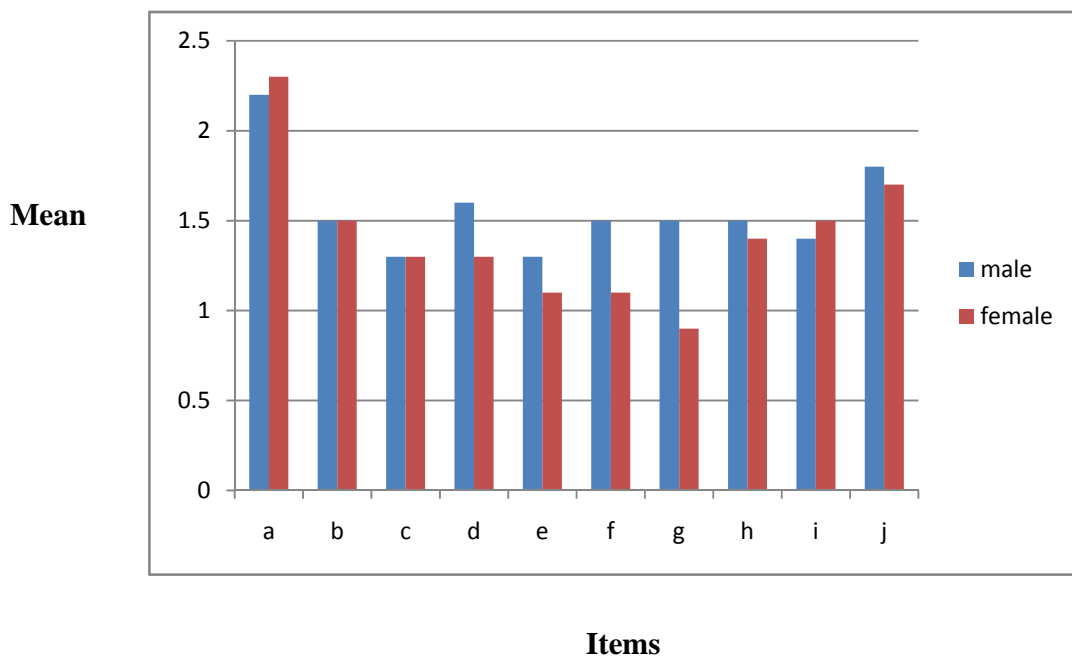
Items	Strongly disagree		Disagree		undecided		Agree		Strongly agree		Total		Mean		Mean Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
A	2.5	0	0	0	0	0	70	90	150	137.5	222.5	227.5	2.2	2.3	4.5
B	0	10	50	25	7.5	7.5	80	70	12.5	37.5	150	150	1.5	1.5	3.0
C	5	7.5	55	55	0	7.5	60	20	12.5	37.5	132.5	127.5	1.3	1.3	2.6
D	5	10	20	40	30	15	70	40	37.5	25	162.5	130	1.6	1.3	2.9
E	2.5	20	60	25	15	7.5	40	60	12.5	0	130	112.5	1.3	1.1	2.4
F	5	17.5	30	40	30	7.5	70	30	12.5	12.5	147.5	107.5	1.5	1.1	2.6
G	2.5	27.5	40	25	22.5	0	70	20	12.5	25	147.5	97.5	1.5	0.9	2.4
H	2.5	15	40	20	22.5	7.5	70	60	12.5	37.5	147.5	140	1.5	1.4	2.9
I	7.5	10	20	25	45	30	70	30	0	50	142.5	145	1.4	1.5	2.9
J	5	5	15	30	22.5	0	60	80	75	50	177.5	165	1.8	1.7	3.5

Table 3 above shows the mean of all male and female respondents on the 10 items addressing objective one. The mean of each item was calculated from the percentages of points awarded each response on the Likert scale (% x points on Likert scale divided by 100). The maximum mean for both male and female is 4.5 while the minimum is 2.4 with a standard deviation of 0.6. The analysis criteria are that the responses with a mean above 3.0 indicate that the participants agreed with the statement while the ones with mean below 3.0 indicate that the respondents disagreed with the statement on the item being tested. The mean response for male and female varied with the items being tested.

However the mean for item b for male and female was the same. The statement that had a higher mean is that purported that teachers in regular schools should be trained with an agreement level of 4.5. This shows that most of the teachers in regular schools are not trained thus need to be trained in special needs. This is followed by the statement that claims that teachers in regular schools use achievement tests to show learners performance with a mean of 3.5. This shows teachers over use the achievement test at the expense of other tests that may be helpful to learners with disabilities. Participants

disagreed with the use of bloom's taxonomy by teachers in testing learners with special needs with a mean of 2.6. This shows that there is a problem with testing in regular schools. The respondents also disagreed that teachers appropriately use valid and reliable tests, help tests, daily living skills, diagnostic tests and aptitude tests.

Figure 4: Mean response rates of knowledge and skills related challenges



The figure 4 above shows the mean response rates of the 10 items addressing knowledge and skills related challenges facing testing of learners with special needs in inclusive setting. All the items other than a and j were positively opined by the participants. However no agreement or disagreement level of male and female was fully attested to 100% by participants. This shows that knowledge and skills related challenges experienced by teachers in testing the learners with special needs significantly vary.

Table-4: Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Male	10	.9	1.5	2.3	1.560	.2675
Female	10	1.4	.9	2.1	1.410	.3900
Valid N (list wise)	10					

The descriptive statistics table 4 shows the maximum mean response rate of the 10 items for all participants is 4.4 and minimum is 2.4 with a standard deviation of 0.6 of both male and female. The maximum mean response rate of male is 2.3 while that of the female is 2.1 and the minimum response rates are 1.5 and 0.9 respectively. The mean response rates of both male and female responses are 2.97. The mean response rate of male was 1.56 while that of female was 1.41 with standard deviation of 0.27 and 0.39 respectively. The mean reflects that most responses were opined towards disagreement of the statements attested. Mean response rate of both male and female participants above 3.0 shows that the item was opined positively while mean below 3.0 shows the item was opined negatively towards disagreeing.

4.2.3 Physical and structural challenges of testing in inclusive setting

Table 5: Tally Sheet

Issues	Strongly Disagree		Disagree		Undecided		Agree		Strongly disagree	
	M	F	M	F	M	F	M	F	M	F
a) Learning resources in inclusive setting	11 (27.5)	11 (27.5)	9 (22.5)	8 (20)	0 (0)	0 (0)	0 (0)	1 (2.5)	0 (0)	0 (0)
b) Most schools practice full inclusion	2 (5)	6 (15)	12 (30)	8 (20)	0 (0)	2 (5)	5 (12.5)	3 (7.5)	1 (2.5)	1 (2.5)
c) curriculum meet special needs	5 (12.5)	11 (27.5)	10 (25)	7 (17.5)	1 (2.5)	0 (0)	4 (10)	2 (5)	0 (0)	0 (0)
d) Teachers pedagogy meet special needs	2 (5)	5 (12.5)	4 (10)	10 (25)	4 (10)	1 (2.5)	9 (22.5)	4 (10)	1 (2.5)	0 (0)
e) Teachers modify curriculum	2 (5)	7 (17.5)	7 (17.5)	9 (22.5)	3 (7.5)	1 (2.5)	8 (20)	2 (5)	0 (0)	1 (2.5)
f) Resources are sufficient for SNE learners	7 (17.5)	11 (27.5)	13 (32.5)	9 (22.5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
g) SNE learners are allocated more assessment time	6 (15)	11 (27.5)	11 (27.5)	6 (15)	0 (0)	0 (0)	3 (7.5)	2 (5)	0 (0)	1 (2.5)
h) Appropriate teacher- pupil ratio	2 (5)	5 (12.5)	1 (2.5)	2 (5)	2 (5)	1 (2.5)	6 (15)	6 (15)	9 (22.5)	6 (15)
i) Large class size in regular schools	1 (2.5)	2 (5)	3 (7.5)	2 (5)	0 (0)	1 (2.5)	9 (22.5)	6 (15)	7 (17.5)	9 (22.5)
j) Barrier free environment in regular schools	3 (7.5)	6 (15)	7 (17.5)	4 (10)	1 (2.5)	0 (0)	9 (22.5)	5 (12.5)	0 (0)	5 (12.5)

The responses on the table 5 were based on the second objective that focused on the challenges related to physical and structure of inclusive setting. The table shows the number of responses for each item with their respective percentages. From the study it was found out that 97.5% of the participants were of the view that there are inadequate learning and testing resources for learners with special needs in regular schools. This was in fully agreement with the findings of a case study in government of Botswana (1993). That stated that inclusive settings lack most diverse testing resources to meet learner's special needs. On the other hand 2.5% of the participants were of a contrary opinion.

On responding to the statement that purport most regular schools practice full inclusion to learners with special needs, 70% of the participants were of the opinion that teachers in regular schools do not practice full inclusion. This concurred with the findings of Harding and Darling (2003). They contended that full inclusion is challenged in most regular schools as some educators prefer to educate disabled learners in special units and special schools. However 25% of the participants were of a contrary opinion while 5% were undecided. The study also revealed that 82.5% of the participants were of the opinion that the curriculum in regular schools is not structured to meet special needs of learners. This concurred with findings of the report of the commission of inquiry into education system in Kenya in 1999.

The report pointed out that the Kenyan curriculum was based on the average learners thus do not meet the special needs of the learners (Government of Kenya 1999). However 15% of the participants were of a contrary opinion while 2.5% were undecided. The study also revealed that 52.5% of the participants were not of opinion that the curriculum in regular school is structured to meet special needs of the learners with special needs in regular schools. This was in fully agreement with Kauffman and Hallahan (1995) who suggested that although combining special education testing and general education testing looks appealing on the surface, this practice may create unfair burden on the system to meet the needs of all learners in regular classrooms. However 35% of the participants were of a contrary opinion while 12.5% were undecided.

More over the study revealed that 62.5% of the participants were not of the opinion that teachers in regular schools vary their pedagogies to meet the needs of the learners with special needs in regular classrooms. This fully concurred with the findings of Mostert et al (2002) and Naanda (2005) cited in Engel Bracht et al (2007) in Namibia. In their study they found out that many teachers had negative attitude towards testing in inclusive settings as it was viewed as a responsibility of special educators and not all teachers. They argued that only trained teachers in special education could apply the appropriate pedagogies. However 27.5% of the participants were of a contrary opinion while 10% were undecided. On responding to the statement that there are sufficient assessment resources for learners with special needs in regular schools, 100% of the participants were not of the opinion.

All participants were in agreement that there were no sufficient assessment resources for learners with special needs in regular schools. This was in agreement with the study of Leung and Mark (2010) on the barriers of appropriate testing in inclusive settings. In their study they identified lack of resources as one of the fundamental challenges. On responding to the statement that learners with special needs are allocated more time in class assessment and in the school time table only 15% of the participants were in agreement whereas 85% of the participants were of a contrary opinion. This was in agreement with findings of Johnstone (2007) in Lesotho who argued that learners with disabilities are not allocated more time as the teachers focus to complete the syllabus for all learners in a regular classroom.

In addition to this, 67.5% of the participants were in agreement that there is inappropriate teacher pupil ratio in inclusive settings. This was in agreement with Slavin (2009) who highlighted the barriers towards testing in regular schools among them was inappropriate teacher pupil that burdens the teacher physiologically and psychologically. However 25% of the participants were of a contrary opinion while 7.5% were undecided.

The result from the study also shows that 77.5% of the participants were of the opinion that large class size in regular schools hinders testing of the learners with special needs. This concurred with the findings of D'Alonzo, Giordano and Cross (1995) who

contended that large class size in regular classrooms is a challenge in that it interferes with the instructional strategies of the teacher and more time consuming. On the other hand 20% of the participants were of a contrary opinion while 2.5% were undecided. The study further indicated that 50% of the participants were of the opinion that classrooms environment in regular schools is not barrier free to allow safe mobility of the learners with disabilities. This was in agreement with Forlin (1997) who contended that testing in regular schools is faced by challenges such as lack of barrier free environment. However 47.5% of the participants were of a contrary opinion while 2.5% were undecided.

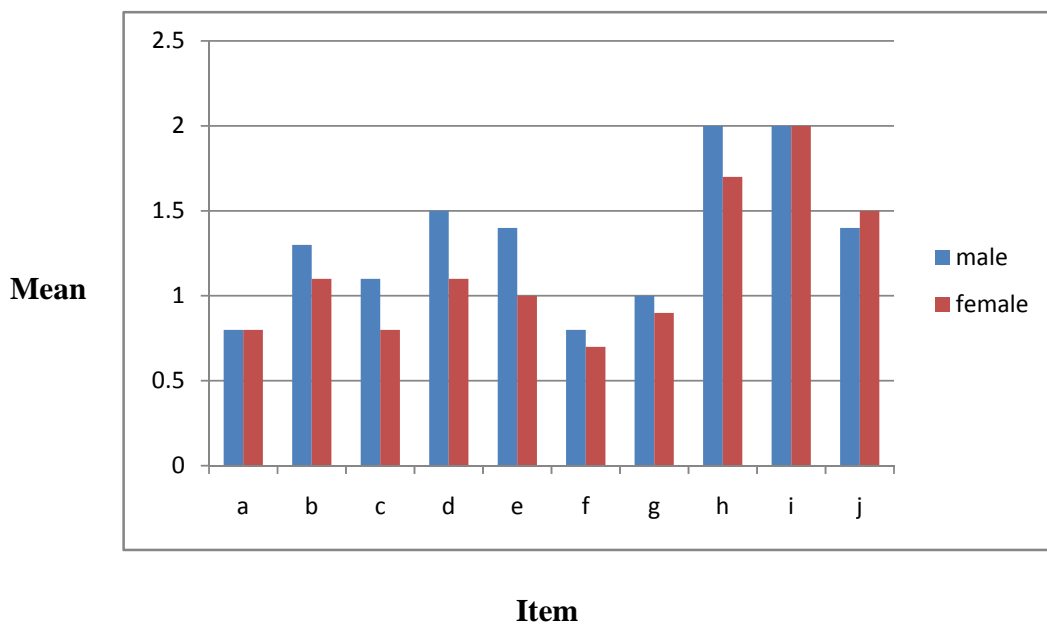
Table 6: Mean response rates for physical and structural challenges of testing in inclusive setting

Items	Strongly disagree		disagree		undecided		Agree		Strongly agree		TOTAL		MEAN		Mean Total M+F
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
A	27.5	27.5	45	40	0	0	0	10	0	0	72.5	77.5	0.8	0.8	1.6
B	5	15	60	40	0	15	50	30	12.5	12.5	127.5	112.5	1.3	1.1	2.4
C	12.5	27.5	50	35	7.5	0	40	20	0	0	110	82.5	1.1	0.8	1.9
D	5	12.5	20	50	30	7.5	90	40	12.5	0	157.5	110	1.5	1.1	2.6
E	5	17.5	35	45	22.5	7.5	80	20	0	12.5	142.5	102.5	1.4	1.0	2.4
F	17.5	27.5	65	45	0	0	0	0	0	0	82.5	72.5	0.8	0.7	1.5
G	15	27.5	55	30	0	0	30	20	0	12.5	100	90	1.0	0.9	1.9
H	5	12.5	5	10	15	7.5	60	60	112.5	75	197.5	165	2.0	1.7	3.7
I	2.5	5	15	10	0	7.5	90	60	87.5	112.5	195	195	2.0	2.0	4.0
J	7.5	15	35	20	7.5	0	90	50	0	62.5	140	147.5	1.4	1.5	2.9

The table 6 above shows the mean response rates of male and female on ten items addressing second objective of the study. The mean of each item was calculated from the percentage of points awarded each response on the Likert scale. The maximum mean response rate of male and female was 4.0 and minimum was 1.5 with a standard deviation of 0.86. The mean response rate of both male and female above 3.00 indicates that the participants agreed with the statement while the ones below 3.00 indicate that the

respondents disagreed with the statement on the item being tested. The agreement and disagreement level of male and female respondents varied with item being tested.

Figure 5: Mean response rates of physical and structural challenges of testing in inclusive setting



The figure 5 above shows the mean response rates of the 10 items used to draw responses on the physical and structural challenges facing testing in an inclusive setting. The items other than h and i were positively opined. However no agreement or disagreement level was fully attested 100% by respondents. Male and female respondents responses varied greatly apart from items a and i. This spells out that there are many physical and structural challenges in testing in inclusive setting that vary with the school where data was collected.

Table 7: Descriptive statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Male	10	1.2	.8	2.0	1.330	.4296
Female	10	1.3	.7	2.0	1.160	.4326
Valid N (list wise)	10					

Table 7 above highlights the descriptive statistics for mean response rates of items addressing second objective of the study. The total number of items is 10 and the mean response rate of all participants is 2.5. The maximum and minimum mean response rates of male and female are 4.0 and 1.5 respectively. The maximum mean response rate of male was 2.0 and that of the female was 2.0 while the minimum was 0.8 and 0.7 respectively. The mean response rate of male was 1.33 while the mean response rate of female was 1.16 with a standard deviation of 0.43 and 0.432 respectively. Mean response rate of both male and female above 3.0 shows that the statements were positively opined towards agreeing while the mean response rate below 3.0 was negatively opined towards disagreeing. The male respondents had a mean higher than the female respondents.

4.2.4 School approach related challenges of testing in inclusive setting

Table 8: Tally sheet

Issues	Strongly Disagree		Disagree		Undecided		Agree		Strongly disagree	
	M	F	M	F	M	F	M	F	M	F
a)Use of IEP for learners with special needs	3 (7.5)	11 (27.5)	13 (32.5)	6 (15)	4 (10)	2 (5)	0 (0)	0 (0)	0 (0)	1 (2.5)
b)Modification of school environment	3 (7.5)	10 (25)	15 (37.5)	9 (22.5)	1 (2.5)	0 (0)	1 (2.5)	0 (0)	0 (0)	1 (2.5)
c)Guiding and counseling SNE learners	2 (5)	4 (10)	6 (15)	6 (15)	0 (0)	2 (5)	12 (30)	8 (20)	0 (0)	0 (0)
d)Buildings in regular schools have ramps	3 (7.5)	12 (30)	16 (40)	7 (17.5)	0 (0)	0 (0)	1 (2.5)	1 (2.5)	0 (0)	0 (0)
e)Regular schools have enough trained teachers	8 (20)	11 (27.5)	12 (30)	6 (15)	0 (0)	1 (2.5)	0 (0)	2 (5)	0 (0)	0 (0)
f)Regular schools have remedial programs	5 (12.5)	8 (20)	11 (27.5)	9 (22.5)	1 (2.5)	0 (0)	2 (5)	2 (5)	1 (2.5)	1 (2.5)
g)Time tables are modified for SNE learners	6 (15)	12 (30)	10 (25)	7 (17.5)	2 (5)	0 (0)	2 (5)	1 (2.5)	0 (0)	0 (0)
h)Regular schools have rails for mobility	6 (15)	12 (30)	13 (32.5)	5 (12.5)	1 (2.5)	1 (2.5)	0 (0)	1 (2.5)	0 (0)	1 (2.5)
i)School administrators support SNE learners	2 (5)	6 (15)	4 (10)	5 (12.5)	1 (2.5)	0 (0)	13 (32.5)	7 (17.5)	0 (0)	2 (5)
j)Schools collaborate with support service providers	1 (2.5)	6 (15)	2 (5)	6 (15)	2 (5)	2 (5)	15 (37.5)	6 (15)	0 (0)	0 (0)

The responses on the table 8 above address the third objective of the study. From the study it was found out that 82.5% of the participants were not of the opinion that regular schools practice individualized educational programmes for the learners with special

needs. This was in agreement with Tylor and Harrington (1998) who contended that placing learners with special needs in regular classrooms create burden on teachers thus not able to use individualized educational programmes to test learners with special needs. However 2.5% of the participants were of a contrary opinion while 15% were undecided. On responding to statement that the school environment in regular schools is modified to accommodate all learners with special needs 92.5% of the participants were not of the opinion. However this was in agreement with findings of Eraclides (2001) on the environmental factors that affect testing in inclusive setting. He argued that environment in learning is shaped and influenced by teachers which is seen to be impractical in regular schools. However 5% of the participants were of a contrary opinion while 2.5% were undecided.

The study also revealed that 50% of the participants were of the opinion that regular schools offer guidance and counseling services to the learners with special needs. However this was not in agreement with other researchers. For instance Forlin (1997) contended that regular schools are faced by rampant challenges among them lack of guiding and counseling services to the learners with special needs. He argued that this resulted from negative attitude from some teachers in inclusive setting. On the other hand 45% of the participants were of a contrary opinion while 5% were undecided. The study further revealed that 95% of the participants were of the opinion that buildings in regular schools have no ramps to enhance safe access by children in wheel chairs. This concurred with the findings of Deslea Konza (2002) from university of Wollongong in Australia on challenges facing inclusive settings. He argued that buildings in regular schools hinder mobility of disabled as they lack ramps. However 5% of the participants were of a contrary opinion.

The study further revealed that 92.5% of the participants were of the opinion that the regular schools do not have enough trained teachers in teaching and testing learners with special needs. This was in agreement with the educational report of Government of Kenya (1999) that regular schools especially primary schools are bloated with enrolment due to compulsory primary education. However 5% of the participants were of a contrary

opinion while 2.5% were undecided. Moreover the study indicated that 82.5% of the participants were not of the opinion that regular schools have remedial programmes for learners with special needs. This was in agreement with the government report of Botswana (1993) on challenges that face testing among them was lack of remedial programs by the teachers. On the other hand 15% of the participants were of a contrary opinion whereas 2.5% were undecided.

On responding to the statement that the time tables in regular schools are modified to meet special needs of learners 87.5% of the participants were in disagreement. This concurred with the findings of Ross Hill (2009) who highlighted the barriers towards inclusive education among them was lack of adequate time in testing the learners with disabilities in regular classrooms. However 7.5% of the participants were of a contrary opinion while 5% were undecided. The study also revealed that 90% of the participants were in disagreement that regular schools have rails to enhance mobility of the children with physical impairments. This was in agreement with the views of Harding (2009) who argued that learning environment that is not barriers free hinders mobility of the learners with physical impairments. The environment needs to have facilities such as rails on the buildings. On the other hand 5% of the participants were of a contrary opinion while 5% were undecided.

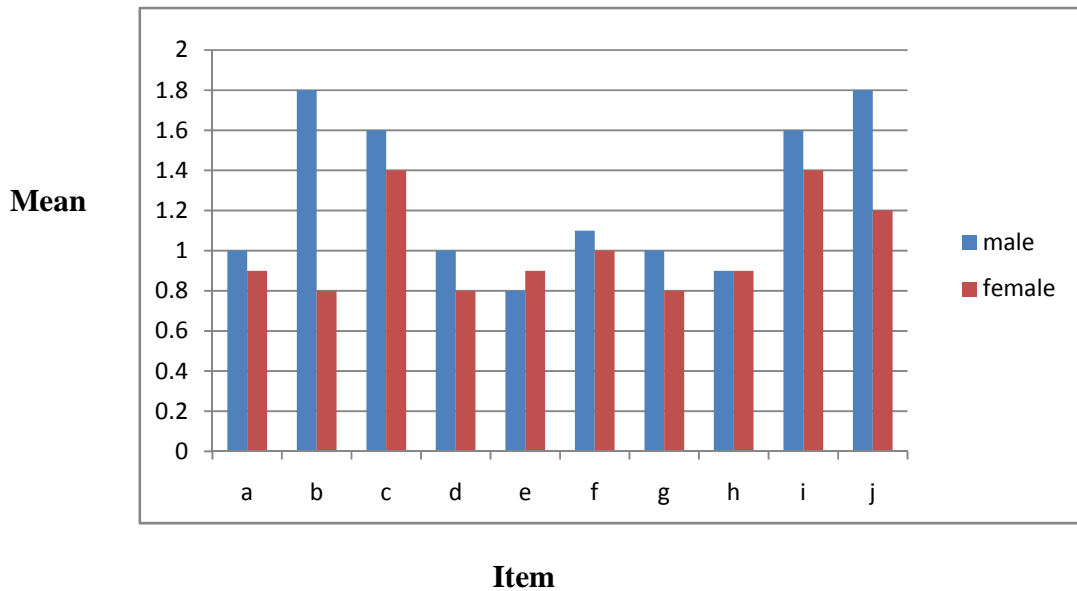
The study also revealed that 55% of the participants were in agreement that the regular schools administration supports learners with special needs. This was in full agreement with findings of Mpofu (2003) who argued that head teachers had positive attitude towards testing in inclusive setting in a research conducted in Zimbabwe's school personnel. However 42.5% of the participants were of a contrary opinion while 2.5% were undecided. Further the study revealed that 52.5% of the participants were of the opinion that the regular schools collaborate with support service providers to enhance inclusion. This was in agreement with findings of Johnstone (2007) who contended that teachers in regular schools need to collaborate with service providers such as counselors, social workers and therapists so as to enhance full inclusion. However 37.5% of the participants were of a contrary opinion while 10% were undecided.

Table 9: Mean response rates of school approach related challenges of testing in inclusive setting

Items	Strongly disagree		disagree		undecided		Agree		Strongly agree		TOTAL		MEAN		Mean Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
A	7.5	27.5	65	30	30	15	0	0	0	12.5	102.5	85	1.0	0.9	1.9
B	7.5	25	75	45	7.5	0	10	0	0	12.5	100	82.5	1.0	0.8	1.8
C	5	10	30	30	0	15	120	80	0	0	155	135	1.6	1.4	3.0
D	7.5	30	80	35	0	0	10	10	0	0	97.5	75	1.0	0.8	1.8
E	20	27.5	60	30	0	7.5	0	20	0	0	80	85	0.8	0.9	1.7
F	12.5	20	55	45	7.5	0	20	20	12.5	12.5	107.5	97.5	1.1	1.0	2.1
G	15	30	50	35	15	0	20	10	0	0	100	75	1.0	0.8	1.8
H	15	30	65	25	7.5	7.5	0	10	0	12.5	87.5	85	0.9	0.9	1.8
I	5	15	20	25	7.5	0	130	70	0	25	162.5	135	1.6	1.4	3.0
J	2.5	15	10	30	15	15	150	60	0	0	177.5	120	1.8	1.2	3.0

The table 9 above shows the mean response rates of all responses on the 10 items addressing third objective of the study. The mean of each item was calculated from the percentages of points awarded each response on the Likert scale. The maximum mean response of both male and female is 3.0 and the minimum is 1.7 with a standard deviation of 0.6. The mean response rate of both male and female above 3.0 indicates that the participants agreed with the statement being tested while response below 3.0 shows that participants disagreed with the statement on the item being tested. In this case all the responses were below the mean showing that all the responses were opined negatively. However there was mode on the mean response rates.

Figure 6: Mean response rates of school approach related challenges of testing in inclusive setting



The figure 6 above shows the mean response rates of male and female respondents on the 10 items used to draw responses on the school approach challenges facing testing in inclusive setting. From the bar graph all the mean responses rates are below 3.0 thus all the items were opined negatively. However there was no disagreement level fully attested 100% by both male and female respondents. This vividly shows that there are school approach related challenges in testing in inclusive setting.

Table 10: Descriptive statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Male	10	1.0	.8	1.7	1.180	.3490
Female	10	.6	.9	1.3	1.010	.2378
Valid N (list wise)	10					

Table 10 above shows the descriptive statistics for the mean response rates of items addressing third objective of the study. The total number of items was 10 with a mean response rate of 2.19. The maximum mean response rate of both male and female

participants was 3.0 and the minimum was 1.7. The maximum mean response rate of male was 1.7 while for female was 1.3 and the minimum was 0.8 and 0.9 respectively, with a standard deviation of 0.35 and 0.24 respectively. The male had a mean response rate of 1.18 while female had a mean response rate of 1.01. The table indicates that all the items were negatively opined towards the disagreeing apart from item c, i and j. However the level of agreement and disagreement of the male and female varied in every item tested.

4.2.5 Behaviour of teachers and learners related challenges of testing in inclusive setting

Table 11: Tally sheet

Issues	Strongly Disagree		Disagree		Undecided		Agree		Strongly disagree	
	M	F	M	F	M	F	M	F	M	F
a) Learners with disabilities are nuisance	4 (10)	3 (7.5)	11 (27.5)	8 (20)	1 (2.5)	1 (2.5)	4 (10)	6 (15)	0 (0)	2 (5)
b)Learners with special needs feel inferior	2 (5)	2 (5)	3 (7.5)	4 (10)	1 (2.5)	2 (5)	12 (30)	7 (17.5)	2 (5)	5 (12.5)
c)Teachers in regular schools feel incompetent	1 (2.5)	0 (0)	6 (15)	2 (5)	2 (5)	1 (2.5)	8 (20)	12 (30)	3 (7.5)	5 (12.5)
d)Educating disabled learners is a waste of time	9 (22.5)	9 (22.5)	9 (22.5)	7 (17.5)	1 (2.5)	1 (2.5)	0 (0)	2 (5)	1 (2.5)	1 (2.5)
e)Teachers expect SNE learner to score below average	2 (5)	3 (7.5)	7 (17.5)	6 (15)	1 (2.5)	0 (0)	6 (15)	8 (20)	4 (10)	3 (7.5)
f) Learners with special needs should attend special schools	1 (2.5)	3 (7.5)	4 (10)	5 (12.5)	1 (2.5)	0 (0)	11 (27.5)	6 (15)	3 (7.5)	6 (15)
g) Learners with special needs reduce teacher efficacy	1 (2.5)	1 (2.5)	8 (20)	7 (17.5)	1 (2.5)	1 (2.5)	10 (25)	7 (17.5)	0 (0)	4 (10)
h)Teachers have negative attitude towards SNE learner	2 (5)	1 (2.5)	6 (15)	9 (22.5)	1 (2.5)	1 (2.5)	11 (27.5)	6 (15)	0 (0)	3 (7.5)
i)Learner with special needs can't function independently	0 (0)	4 (10)	7 (17.5)	8 (20)	2 (5)	2 (5)	11 (27.5)	4 (10)	0 (0)	2 (5)
j)Disabilities are caused by curses	16 (40)	16 (40)	3 (7.5)	3 (7.5)	1 (2.5)	1 (2.5)	0 (0)	0 (0)	0 (0)	0 (0)

The study revealed that 65 % of the participants were not of the opinion that learners with special needs are nuisance in the regular classroom. This was in contrast with findings of Frances and Potter (2010) who contended that students with disabilities are nuisance in that they tend to disrupt the classrooms with behavioural disorders as their cognitive is not well developed. However 30% of the participants agreed that they are nuisance while 5% of the participants were undecided. The study also revealed that 65% of the participants were of the opinion that learners with special needs in education feel inferior in regular schools. This was in fully agreement with Khudorenko (2011) whose study contended that learners with special needs in education suffer low esteem, isolation, depression and aggression. However 27.5% of the participants were of a contrary opinion while 7.5% were undecided.

On responding to the statement that teachers in regular schools feel incompetent to test learners with special needs in inclusive setting, 70% of the participants were of the view that teachers in regular schools feel incompetent to test such learners. This was in agreement with the findings of Forlin (1997) who argued that teachers in inclusive setting feel incompetent to deal with learners with special needs as most of them lack training in special needs. However 22.5% of the participants were of a contrary opinion while 7.5% were undecided.

The study further revealed that 85% of the participants were not of the opinion that educating learners with special needs in regular schools is a waste of time and resources. This was in agreement with the study findings of Ajuwon (2008) who highlighted the benefits of educating learners with special needs in education among them was development of life skills and personal development. This was in line with findings of Burke and Sutherland (2004) whose study findings contended that pre service teachers trained in inclusion had a positive attitude towards learners with disabilities. However 10% of the participants were of a contrary opinion while 5% were undecided. On responding to the statement that teachers in regular schools expect learners with special needs to score below average 52.5% of the participants were in agreement. This was in agreement with the findings of Artiles and Dyson (2009) who argued that learners with

special needs lower the school mean scores and this result to teachers not supporting testing of learners with special needs in mainstream since education system is exam oriented. However 45% of participants were of a contrary opinion while 2.5% were undecided.

The study also revealed that 65% of the participants were of the opinion that the learners with special needs in education should attend special schools. However it was in a contrast with the findings of Ferguson (1996) whose study contended that separate schools system has been challenged from a human right point of view as discriminative thus supports full inclusion. On the other hand 32.5% of the participants were of a contrary opinion while 2.5% were undecided. The study also revealed that 52.5% of the participants were of the opinion that inclusion of special needs learners in regular schools reduce teacher's efficacy in testing. This was in contrast with Minke, Bear Keener and Griffin (1996) who argued that teachers had greater sense of self efficacy and felt much more confident in teaching and testing in regular schools in his study on the experiences of teachers in inclusive classroom. However 42.5% of the participants were of a contrary opinion while 5% were undecided.

The study further revealed that 50% of the participants were of the opinion that teachers have negative attitude towards testing learners with special needs in regular schools. This was not in agreement with the study of Bayliss and Burden (2000) a survey in UK that found that teachers who had an experience with inclusion had positive attitudes towards testing learners with special needs in inclusive setting. However 45% of the participants were of a contrary opinion while 5% were undecided. On responding to the statement that learners with special needs cannot function independently in the regular schools 47.5% of participants were not of the opinion. This was in contrast with the findings of Ajuwon (2008) whose study highlighted benefits of inclusion among them was the learners develop life skills that enable them to function independently in the society. However 42.5% of participants were of a contrary opinion while 10% were undecided.

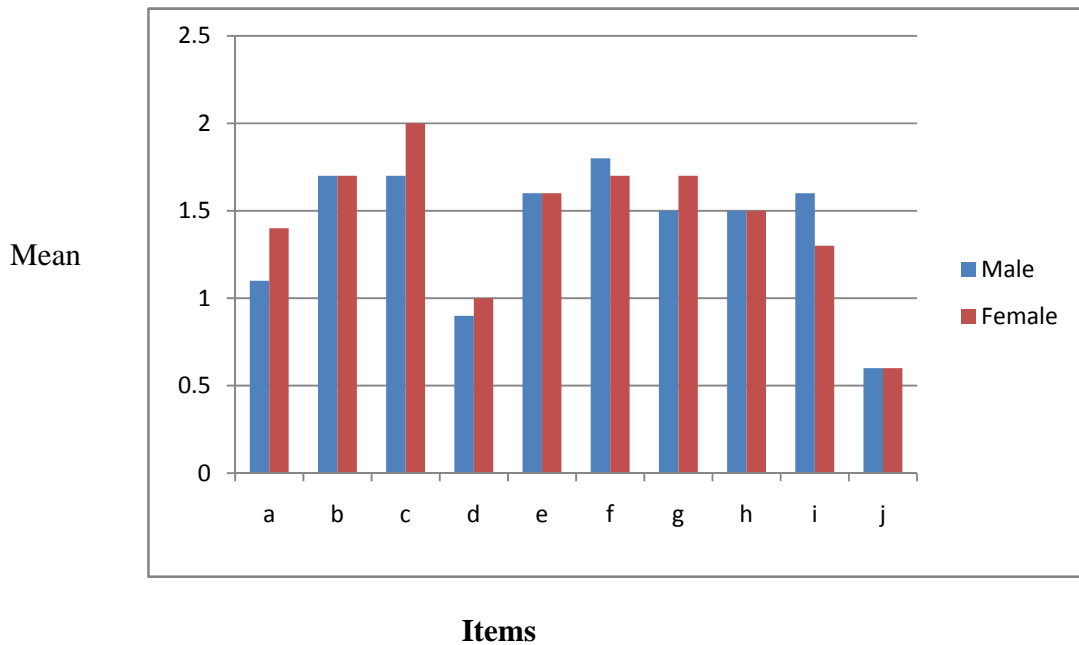
The study further revealed that 95% of the participants were for the opinion that special needs are not caused by curses and punishment from God. This was in agreement with findings of Forlin (1997) who contended that disabilities have various causes such as diseases but not curses as these are beliefs and not factual. However 5% of the participants were undecided on this statement.

Table 12: Mean response rates of behaviour of teachers and learners related challenges

Items	Strongly disagree		disagree		undecided		Agree		Strongly agree		Total		Mean		Mean Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
A	10	7.5	55	40	7.5	7.5	40	60	0	25	112.5	140	1.1	1.4	2.5
B	5	5	15	20	7.5	15	120	70	25	62.5	172.5	172.5	1.7	1.7	3.4
C	2.5	0	30	10	15	7.5	80	120	37.5	62.5	165	200	1.7	2.0	3.7
D	22.5	22.5	45	35	7.5	7.5	0	20	12.5	12.5	87.5	97.5	0.9	1.0	1.9
E	5	7.5	35	30	7.5	0	60	80	50	37.5	157.5	155	1.6	1.6	3.2
F	2.5	7.5	20	25	7.5	0	110	60	37.5	75	177.5	167.5	1.8	1.7	3.5
G	2.5	2.5	40	35	7.5	7.5	100	70	0	50	150	165	1.5	1.7	3.2
H	5	2.5	30	45	7.5	7.5	110	60	0	37.5	152.5	152.5	1.5	1.5	3.0
I	0	10	35	40	15	15	110	40	0	25	160	130	1.6	1.3	2.9
j	40	40	15	15	7.5	7.5	0	0	0	0	62.5	62.5	0.6	0.6	1.2

Table 12 above shows the response rates of male and female respondents on the 10 items addressing fourth objective of the study. The mean response of each item was calculated from the percentages of points awarded each response on the Likert scale. The maximum mean response rate of both male and female participants was 3.8 and the minimum mean response rate was 1.2 with a standard deviation of 0.79. The maximum response rate of male was 1.8 while of female was 1.7 and the minimum was 0.6 and 2.0 respectively. The mean response rate of both male and female below 3.0 shows that the item was negatively opined while the mean response rate above the same shows the response was positively opined. The mean response rates for both male and female respondents varied. However there was a mode in two items tested.

Figure7: Mean response rates of behaviour of teachers and learners related challenges



The figure 7 above show the mean response rates of male and female on the 10 items used to draw responses on the challenges facing testing in inclusive setting. The items address the fourth objective of the study based on the behavior of the teachers and learners as a challenge on testing in inclusive setting. From the graph, the items other than d and j were opined negatively towards disagreeing. However no disagreement or agreement level was fully attested 100% by the respondents.

Table 13: Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Male	10	1.2	.6	1.7	1.400	.3972
Female	10	1.4	.6	2.0	1.450	.4035
Valid N (list wise)	10					

Table 13 highlights the descriptive statistics for the mean response rates of male and female of the items addressing the fourth objective of the study. The total number of items was 10 with a mean response of 2.85. The maximum mean response rate for both male and female was 3.7 and the minimum response rate was 1.2. The responses with a mean response rate above 3.0 were positively opined towards agreeing while the mean response rate below 3.0 indicates that the item was negatively opined towards disagreeing.

4.2.6 National agenda for inclusivity related challenges

Table 14: Tally sheet

Issues	Strongly disagree		Disagree		Undecided		Agree		Strongly agree	
	M	F	M	F	M	F	M	F	M	F
a)Teachers awareness of national policy	1 (2.5)	4 (10)	10 (25)	11 (27.5)	4 (10)	3 (7.5)	4 (10)	1 (2.5)	1 (2.5)	1 (2.5)
b)Available of national policy for testing SNE learners	2 (5)	1 (2.5)	6 (15)	3 (7.5)	4 (10)	3 (7.5)	6 (15)	10 (25)	2 (5)	3 (7.5)
c)Teachers implement national policy for testing SNE learner	1 (2.5)	4 (10)	4 (10)	9 (22.5)	4 (10)	2 (5)	10 (25)	4 (10)	1 (2.5)	1 (2.5)
d)Syllabus reflect national agenda for inclusivity	3 (7.5)	6 (15)	7 (17.5)	5 (12.5)	0 (0)	2 (5)	10 (25)	5 (12.5)	0 (0)	2 (5)
e)Teachers base learning on national agenda for inclusivity	1 (2.5)	4 (10)	7 (17.5)	8 (20)	1 (2.5)	1 (2.5)	11 (27.5)	6 (15)	0 (0)	1 (2.5)

From the study it was found out that 65% of the participants were not of the opinion that teachers in regular schools are aware of national policy in testing learners with special needs in education. This concurred with the study findings of Slavin (2009) who contended that lack of awareness of testing policies by regular schools teachers affects appropriate testing negatively in inclusive setting. However 17.5% of the participants were of a contrary opinion while 17.5% of participants were undecided.

On responding to the statement that there is no clear national policy for testing the learners with special needs in regular schools 52.5% of the participants were in agreement. This was also in agreement with the findings of Bartak and Fry (2004) on their study on challenges that face testing in mainstream among them was lack of policies in education systems. However 30% of the participants were of a contrary opinion while 17.5% of participants were undecided.

The study further revealed that 45% of the participants were not of the opinion that teachers in inclusive setting implement the national policy on testing in inclusion of the learners with special needs. This was in agreement with findings of Harding and Darling (2003) who argued that teachers in most regular classrooms fail to administer tests according to the educational policies due to lack of awareness and training in inclusion. However 40% of the participants were of a contrary opinion while 15% were undecided.

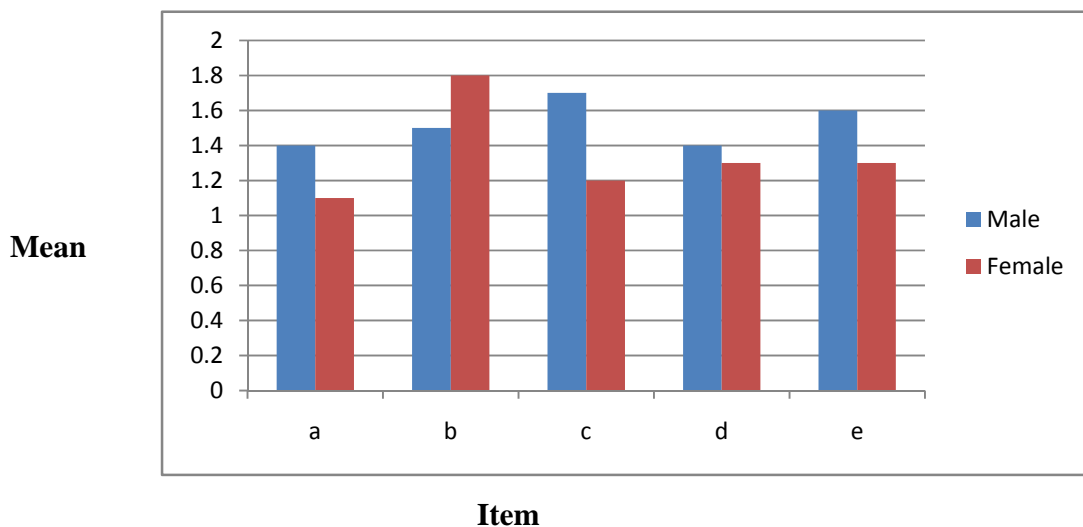
The study also revealed that 52.5% of the participants were of the opinion that the school syllabus used in regular schools do not reflects the national agenda for inclusivity. This concurred with the findings of Leung and Mak (2010) who argued that school syllabus that do not reflect the inclusion of learners with disabilities do not enhance testing in inclusive settings. However 42.5% were of a contrary opinion while 5% were undecided. The study further revealed that 50% of the participants were not of the opinion that teachers base their teaching and learning activities on the national policy for inclusion. This was in agreement with Leung and Mak (2010) who argued that teachers have incomplete understanding of inclusive education that hinders proper preparation of teaching and testing activities. However 45% of the participants were of a contrary opinion while 5% of participants were undecided.

Table 15: Mean response rates of challenges related to national agenda for inclusivity in Kenya

Items	Strongly disagree		disagree		undecided		Agree		Strongly agree		Total		Mean		Mean Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M+F
A	2.5	10	50	55	30	22.5	40	10	12.5	12.5	135	110	1.4	1.1	2.5
B	5	2.5	30	15	30	22.5	60	100	25	37.5	150	177.5	1.5	1.8	3.3
C	2.5	10	20	45	30	15	100	40	12.5	12.5	165	122.5	1.7	1.2	2.9
d	7.5	15	35	25	0	15	100	40	0	25	142.5	130	1.4	1.3	2.7
E	2.5	10	35	40	7.5	7.5	110	60	0	12.5	155	130	1.6	1.3	2.9

The table 15 above shows the mean response rates of male and female on the 5 items of the study addressing the fifth objective of the study. The mean response rate of each item was calculated from the percentages of points awarded each response on the Likert scale. The maximum mean response rate of both male and female was 3.3 and the minimum response rate was 2.6 with a standard deviation of 0.4. The response rates of the male and female varied greatly though there was a mean mode on two items.

Figure 8: Mean response rates of the challenges related to national agenda for inclusivity in Kenya



The figure 8 shows the mean response rates of male and female on the 5 items used to draw responses on questions addressing fifth objective of the study. The questions used were intended to investigate challenges related to the national agenda for inclusivity in Kenya in testing learners with special needs in inclusive setting. Other than item b the items were opined negatively towards disagreeing. The responses with the mean response rate of both male and female above 3.0 indicate that the response opined positively towards agreeing while the ones below 3.0 indicate that the response opined negatively towards disagreeing. However there was no agreement or disagreement level that fully attested to 100% by participants.

Table 16: Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Male	5	.3	1.4	1.6	1.520	.1304
Female	5	.7	1.2	1.7	1.340	.2702
Valid N (list wise)	5					

The table 16 above shows the descriptive statistics of the mean response rates of male and female respondents on the 5 items addressing fifth objective of the study. The questions used intended to investigate the challenges related to national agenda on inclusivity in Kenya facing testing in inclusive setting. The maximum response rate of both male and female was 3.3 and the minimum was 2.6. The maximum response rate of male respondents was 1.6 while of female was 1.7 and the minimum was 1.4 and 1.2 respectively. The mean response rate of both male and female was 2.6 with a standard deviation was 0.4. The table shows that most items were opined negatively towards disagreeing. The responses of male and female significantly varied since the respondents were independent.

CHAPTER FIVE

5.0 Summary, conclusions and recommendations

5.1 Introduction

The purpose of this study was to determine adequacy of assessment practice in inclusive education situations and extend the current research base on testing in inclusive education provision by delineating challenges facing testing learners with special needs in inclusive setting in Kenya. The challenges were categorized as knowledge and skills, physical and structural, school approach, teachers and learners' behavior and national agenda for inclusivity in Kenya. The prime focus for this chapter is to discuss the findings of this study in relation to the literature review, following a brief summary of the results of the research. More over there is a section set aside for recommendations for further research in the field of implementing proper testing in inclusive setting. The potential practical implications of this research are also presented.

5.2 Summary of the findings

The researcher used questionnaires to gather information from the respondents. The data collected was rated on Likert scale of five points. The findings from this research are discussed in this chapter based on the objectives of the study.

5.2.1 Knowledge and skills related challenges of testing in inclusive setting

The findings from questionnaire data focusing on the knowledge and skills related challenges indicate that, male and female participants disagreed with the statements related to existence of appropriate support to the learners with special needs in testing in inclusive setting. It is notable that most teachers in inclusive settings fail to provide the necessary support due to knowledge and skills related challenges. This conforms to the study findings by Chhabra et al (2010). In their study they outlined that testing in inclusive setting is faced by rampant challenges.

From this study the following were confirmed to be knowledge and skills related challenges in testing in inclusive setting, many teachers are not trained in special needs education, lack of valid and reliable tests, lack of fairness in testing, over dependent of

achievement test, inappropriate use of self help tests, aptitude tests and diagnostic tests. These findings concurred with Forlin (2001) who contends that inclusive education is seen by many teachers as troubled concept, thus making it difficult for teachers to practice and implement proper testing in inclusive setting. Graham and West wood (2003) noted some of the challenges that face testing in inclusive setting as noted in this study. In their study they argued that the main challenge that faces testing in inclusive setting is lack of knowledge and skills on how to implement proper testing in inclusive setting.

5.2.2 Physical and structural related challenges of testing in inclusive setting

The findings from questionnaire data focusing on physical and structural related challenges indicate that, the participants largely disagreed with statements that opined that there is availability of enough and suitable resources and facilities for testing learners in inclusive settings. This corresponds with the views of Forlin (1997). In his study he argued that regular schools lack enough resources for testing learners with special needs. In this study the following physical and structural related challenges were noted, lack of learning resources, inappropriate methods of testing, large enrolment, lack of barrier free class rooms, inappropriate time allocation for testing and rigid curriculum that is not flexible to address the special needs of individual learners with special needs.

The participants largely agreed that these challenges greatly hinder implementation of inclusive education thus interfering with appropriate testing in inclusive settings. This concurs with the study of Bray (1986) and Graham (2003) on the challenges that hinder inclusive education in regular schools. From this study it is worth to note that the physical and structural related challenge which was opined to have a major negative impact on testing is the large class size in regular schools. This is as a result to free primary education where all children are entitled to free and compulsory education. Participants opined that large class size limits the teacher's efficacy to test all the learners with special needs depending on their diversities at the expense of other learner without disabilities in the same classroom. This concurs with the study by Artiles and Dyson (2009). In their study they contend that teachers usually have objection having learners with special

needs in their regular class or school fearing that they would lower the mean scores of the class or the school, since our education system is exam oriented in nature.

5.2.3 School approach related challenges of testing in inclusive setting

Findings of this research shows that most participants predominantly negatively viewed statements that outlined that school approaches emblaze appropriate testing for the learners with special needs in inclusive settings. This conforms to the findings of Ross-Hill (2009), who argued that most regular schools fail to address the diversities of special needs learners due to unfriendly school environment. Most regular schools environment is not modified to address the special needs of the learners in inclusive setting (Forlin 2001). From the findings of this study it is worth noting the following school approach related challenges of testing in inclusive setting highlighted in this study, lack of barrier free learning environment, ramps on buildings, remedial programmes, rails for mobility, administration support, collaboration with service providers, enough trained teachers in special needs education and individualized educational programmes.

These findings too concurred with the findings of Harding (2009). He contended that inclusive settings do not provide appropriate testing to learners with special needs by highlighting some of the above challenges as a drawback towards proper inclusion. In this study the participants largely opined negatively to those statements that proposed that school approach enhance appropriate testing to learners with special needs in inclusive settings. However no statement was attested 100%. The agreement and disagreement levels for male and female participants greatly varied since their responses were independent.

5.2.4 Behaviour of teachers and learners related challenges of testing in inclusive setting

The findings from this study show that testing of the learners with special needs in inclusive setting is mainly faced by challenges related to behavior of teachers and learners. Most participants opined negatively to the statements that highlighted that teachers and learners behavior support testing in inclusive setting. This conforms to the

study findings of Brownlee and Carrington (2000) who examined the beliefs and attitudes of Australian pre service teachers towards people with disabilities. The findings showed that some teachers possessed negative attitudes that hinder implementation of inclusive education. Teachers are prime change bearers thus their behavior is vital in learning and testing of the learners with special needs (chhabra and Srivastava 2010).

The findings from this study show that most participants largely disagreed with the statements that opined that behavior of teachers and learners really support testing in inclusive setting. The agreement and disagreement level of male and female participants greatly varied depending on the school where the data was collected. However no statement attested 100%, which show that the participants were independent on their responses. The study highlighted the following as the behavior related challenges of testing in inclusive setting in Kenya, learners with special needs feel inferior in regular schools, teachers in regular schools feel incompetent to test learners with special needs, teachers in regular schools expect the learners with special needs to score below the average, teachers believe that learners with special needs ought to attend special schools and units, teachers believe that inclusion reduces the teachers efficacy in regular schools and teachers believe that special needs learners cannot function independently.

These challenges concur with the findings of Deslea Konza (2002) from University of Australia on challenges that face inclusion. More over conforms to the findings of Harding and Darling (2003) who conducted a research to investigate teacher's attitudes and understanding of inclusion in United State. They argued that many teachers have different attitudes towards inclusion. In this study some teachers portrayed a positive attitude towards learners with special needs in regular schools by disagreeing that they are nuisance in inclusive setting, educating them is a waste of time and disabilities are caused by curses and punishment from God. However the level of disagreement from the participants greatly varied.

5.2.5 National agenda for inclusivity in Kenya

The findings from questionnaire data for this research highlights that there are challenges of testing related to national agenda for inclusivity in Kenya. However the agreement and disagreement level of all participants greatly varied as their responses were independent. Most participants agreed that teachers in regular schools are not aware of National policy in testing learners with special needs. This conforms to the findings of Bray (1986). He contends that many teachers are not aware of policies on inclusion.

From this study the following are the national agenda for inclusivity related challenges of testing in Kenya, lack of clear national policy for testing the learners with special needs in regular schools, lack of a school syllabus that reflects the national agenda for inclusivity, lack of teaching and learning activities based on the national policy for inclusion in regular schools. This conforms to the findings of Clough (2000) on the challenges that face implementation of inclusive education in developing countries. He argued that the school syllabus ought to have learning activities based on intellectual skills, cognitive strategies, verbal information and attitude.

5.3 Conclusion

The focus of this study was to investigate challenges that face testing in inclusive education setting. From the outcome of this study, testing practice in inclusive education setting seem to be faced by rampant challenges related to knowledge and skills, physical and structure, school approach, behavior of teachers and learners as well as national agenda for inclusivity in Kenya. This concurs with findings of Chhabra et al (2010) on inclusive education in Botswana. Testing in inclusive setting has more often than not looked at due to lack of trained personnel, learning resources, educational facilities and testing policies. This study shows that more research should target issues raised in this study so as to ensure good practices that will ensure high achievement and better practice in assessment in inclusive education. The implication of results of this study is that there is indeed inadequate assessment practice in inclusive education settings. There is need to equip teachers with knowledge and skills in testing in inclusive education, appropriate educational resources, proper school approaches, appropriate testing policy. There is also

need to encourage teachers and learners behaviour that support learners with special needs in inclusive setting.

5.4 Recommendations

The findings of this study provide a useful indication of the challenges that face testing in inclusive settings in Kenya. The education stake holders who can enormously gain from findings of this study include teachers, head teachers, educational administrators, examiners and policy makers. The successful implementation of any educational idea in inclusive setting will anchor on the following recommendations of this study.

- a) Teachers in regular schools should be well equipped with knowledge and skills on teaching and testing the learners with special needs in inclusive settings. This can be achieved through seminars, in service courses for regular teachers and training teachers on the same in teachers training colleges.
- b) The regular schools should be well equipped with appropriate educational physical facilities and learning resources that meet individual special needs of learners in order to maximize learning for all learners without any form of discrimination in regular schools.
- c) The education stake holders should ensure that all regular schools practice appropriate school approaches that address learners with special needs regardless of their special educational needs in inclusive settings.
- d) The teachers and learners in the regular schools need to be well informed of appropriate ways of relating with the learners with special needs constructively in inclusive educational settings without any form of discrimination. They should accept learners with special needs in order for them to feel loved and accepted members of the school community and learner from them.
- e) The policy makers in Kenya should review the existing educational policies on implementation of inclusive education. They should come up with more clear policies that will focus on the individual educational special needs in the inclusive settings. The schools should be provided with those policies in order to practice them and more so create awareness to the public.

5.5 Suggestions for further research

The main focus of this research study was on the challenges that face testing in inclusive setting in Kenya. To narrow down to the scope of the study, only the head teachers and teachers of eight public regular schools were participants. There are other challenges that could hinder proper testing in inclusive setting thus there is need for further research to continue investigating on the challenges that face testing in inclusive setting so as to maximize learning for the learners with special needs in inclusive settings.

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APPENDICES

Appendix: I

Questionnaire for Head Teachers and Teachers

INCLUSIVE SETTING

Inclusive setting is a regular school in which learners with special needs in education study with peers who do not have special needs. It is either full or regular inclusion. The government of Kenya through the ministry of education is encouraging primary schools to practice full inclusion as an education policy. This questionnaire focuses on the challenges facing testing in inclusive setting.

INSTRUCTIONS

Answer all the questions on the space provided. Do not write your name on the questionnaire for all the information will be treated confidentially.

Sub County..... Name of the school.....

School enrolment..... Years in teaching.....

Answer the following questions by ticking in the box provided

Gender: Male Female Type of inclusion: Full inclusion

Regular inclusion

Designation: Head teacher Teacher

Qualification: P1 teacher Bed diploma Post graduate diploma

Bed graduate degree Post graduate degree

Section A: Entry level questions

1) Are you aware of inclusive education and its practices?

Yes No

2) Are you trained in special needs education?

Yes No

If yes specify the areas of your training.....

3) Are you aware of the support services for the learners with special needs in education? Yes No

If yes state three support services for learners with special needs in education

.....
.....
.....

4) Are you aware of disabilities and other special needs that are common in regular school? Yes No

If yes state three disabilities common in regular a classroom

.....
.....
.....

Are you aware of forms of inclusive education practiced in regular schools?

Yes No

If yes, list them

.....
.....
.....

Use the following key to answer the questions that follows by ticking in the box provided

Key: 1-Strongly disagree 2-disagree 3-undecided
4-Agree 5-Strongly agree

Section D: School approach

ITEMS	Strongly disagree	disagree	undecided	agree	Strongly agree
a) Regular schools practice individualized educational programmes for learners with special needs	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
b) The school environment in regular schools is modified to accommodate all learners with special needs	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
c) The regular schools offer counseling services to learners with special needs	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
d) The buildings in regular schools have ramps to enhance safe access by children in wheel chairs	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
e) The regular schools have enough trained teachers in teaching and testing the learners with special needs	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
f) Regular schools have remedial programs for learners with special needs	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
g) The time tables in regular schools are modified to meet special needs of learners	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
h) The regular schools have rails to enhance mobility of children with physical impairments	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
i) The regular schools administration supports learners with special needs	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
j) The regular schools collaborate with support service providers to enhance inclusion	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

Section F: National agenda for inclusivity in Kenya

ITEMS	Strongly disagree	disagree	undecided	agree	Strongly agree
a) Teachers in regular schools are aware of national policy in testing learners with special needs in education	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
b) There is no clear national policy for testing the learners with special needs in regular schools	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
c) Teachers in inclusive setting implement the national policy on testing in inclusion of learners with special needs	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
d) The school syllabus used in regular schools reflects the national agenda for inclusivity	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
e) Teachers base their teaching/ learning activities on the national policy for inclusion	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

Thank you for filling in this questionnaire and God bless you.

Appendix: II

Letter of introduction to the respondents

Nairobi University,
Department of Psychology,
P. O. Box 30197-00100,
Nairobi. Kenya.

Cell phone: +254725830681

Email: davisgitonga7@gmail.com

Date:

Research Title: Testing in inclusive education setting in primary schools in Kenya

My name is Davis Gitonga. I am a teacher in Murang'a County and currently studying towards a Masters in education at the University of Nairobi in Kenya. As a partial requirement of my degree, I need to complete a research project for my project report. The aim of my study is to explore the challenges that face testing in inclusive setting in Kenya. I would like to invite you to participate in my current research project. If you are interested in taking part as a participant, you will complete a questionnaire about the challenges facing testing the learners in the inclusive setting in Kenya. This will take about fifteen minutes and during the filling in of the questionnaire, you can ask any question regarding this study.

Your participation in this study is absolutely voluntary. At any time you can withdraw from this study by informing me. You will not be penalized for that. I assure you that there is no potential risk in your participation in this study for all information you provide will be treated with maximum confidence more so you will remain anonymous. You can ask for any additional information from this study at any time and if you agree to participate in this research, kindly sign the attached consent form and return it to me.

Thank you for your consideration of this research project.

.....

Davis Gitonga

(davisgitonga7@gmail.com)

Appendix: III

Letter of obtaining permission from the schools

Nairobi University,
Department of Psychology,
P.O. Box 30197-00100,
Nairobi. Kenya.

Cell phone: +254725830 681

Email: davisgitonga7@gmail.com

Date

RE: PERMISSIOM FROM THE SCHOOL

My name is Davis Gitonga. I am teacher in Murang’a County and currently studying a Masters degree in education-Measurements and Evaluation at the University of Nairobi in Kenya. As a partial requirement of my degree, I need to complete a research project for my research study. The aim of my study is to explore the challenges facing testing in the inclusive setting in Kenya.

I would like to invite five teachers from your school to be the participants. They will be asked to complete a questionnaire about the challenges that face testing in inclusive setting. This will take about fifteen minutes. During the filling in of the questionnaires, they can ask any question relating to this study. Their participation is absolutely voluntary. They have the right to withdraw from the study at any time, and they will not be penalized for it. There is no potential risk in their participation in this study since all the information provided will be treated confidential and will remain anonymous. The participants can ask any additional information from this study at any time. More over I will provide you and the participants with the summary of results if need be. If you agree to this research being conducted in your school, please sign the attached consent form and return it to me.

Thank you for your consideration of this research project.

.....

Davis Gitonga (davisgitonga7@gmail.com)

Appendix: IV

Consent form for the respondents

Nairobi University,
Department of Psychology,
P. O. Box30197- 00100,
Nairobi. Kenya.

Cell phone: +254725830681

Email: davisgitonga7@gmail.com

Date:

Research Title: Testing in inclusive education setting in primary schools in Kenya

I understand the aim and purpose of the research study undertaken by Davis Gitonga. I have read the information provided about this research and understand that I will complete a questionnaire regarding the challenges facing testing in an inclusive setting. I can ask any question in relation to this study.

I also understand that my participation is absolutely voluntary and I can withdraw from this study at any time without any explanation if I wish. I am also assured that there is no risk in my participation in this study. I am informed that I will be provided with summary of the results, and I can request a copy of the study. I understand that if I have any concerns or complaints, I can contact the researcher.

By signing below, I agree to participate in this research.

Name of the participant.....

Name of the school.....

Signature.....

Date.....