FACTORS INFLUENCING INSTRUCTIONS AMONG INTELLECTUALLY
CHALLENGED LEARNERS IN SPECIAL UNITS IN MAARA DISTRICT,
THARAKA NITHI COUNTY, KENYA

BY

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other University.

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DEDICATION

I wish to dedicate this thesis to my dear husband Leonidas Mbae for his output and unconditional support, our daughters Wanja, Gathoni and Nyawira for their understanding during the research process. Thank you for your love and support throughout this study.
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Special thanks to the Almighty God for His love, providence and for giving me wisdom to accomplish my work.

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<tr>
<td>AAIDD</td>
<td>American Association on Intellectual and Developmental Disabilities</td>
</tr>
<tr>
<td>ATDP</td>
<td>Attitudes Towards Disabled Persons</td>
</tr>
<tr>
<td>IDEA</td>
<td>Individuals with Disabilities Education Act</td>
</tr>
<tr>
<td>IEP</td>
<td>Individualized Education Program</td>
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<tr>
<td>MAS</td>
<td>Mainstreaming Attitude Scale</td>
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<td>SRSD</td>
<td>Self-regulated strategy development</td>
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ABSTRACT

The purpose of the study was to find out factors influencing instructions among intellectually challenged learners in special units in Maara district, Tharaka Nithi County. The study employed a descriptive survey design. Target population of the study included 150 pupils and 15 teachers from the 9 special units in Maara district. Census sampling was used to pick all the 9 schools with special units for learners who are mentally challenged. From each of the 9 schools, 9 teachers were randomly selected while 30 parents of learners with mental retardation were selected using purposive sampling. The study participants therefore comprised of 9 teachers, 30 parents and 1 County Director of Education, yielding a total of 40 respondents. A questionnaire designed for teachers, an interview schedule for parents and one for the County Director of Education were used as the main tools for data collection. The study gathered both quantitative and qualitative data. Quantitative data collected was coded and entered into SPSS programme version 17.0 for analysis. Descriptive statistics used included mean scores, standard deviations, frequencies and percentage. These descriptive statistics were used to describe teacher and parent factors influencing learners who are intellectually challenged, learning of learners who are intellectually challenged, teaching methods and respondent views regarding learning of learners who are intellectually challenged. Qualitative data was analyzed by coding responses to the interviews according to emerging themes and reporting the findings in accordance with research objectives. The study established that negative attitude among the school community was one of the major factors influencing teaching and learning among learners who are intellectually challenged in Maara district. The major factors which led to development of negative attitude were mainly parental preference of the school, parental feelings about the child, parental attitude towards teachers, teachers’ willingness to accept learners who are intellectually challenged and teachers’ attitude toward inclusion of learners who are intellectually challenged in regular classrooms. The study recommends that the Ministry of Education through Teachers Service Commission should ensure that teachers in special schools are adequately equipped with skills to handle all cases of disability; the ministry should also organize regular in-service training for all educators to improve their knowledge about ways of accepting and practicing inclusion of learners with disabilities in regular classes; in addition, parents and teachers should develop a positive attitude towards learners with disabilities.
CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Children who are mentally retarded have existed in all societies for a long time with their problems not being attended (Pilusa, 2006). The reason for this lack of concern has been due to the fact that members of most societies have tended to see the persons with mental retardation as an economically handicapped (Rashid, 2012). People with mental retardation have been seen by such societies as having little to contribute to the welfare of the society (Olson, 2003). United Nations Educational Scientific and Cultural Organization (UNESCO, 1994), expressed the views that parents of the handicapped children tended to feel ashamed. Such children were therefore hidden away from the rest of the society. It is therefore evident that lack of concern started with the parents of such children.

Historically, societies have responded in various ways towards persons with disabilities (Campbell, Gilmore & Cuskelly, 2003). Mercer and Payne (1975) stated that the treatment of persons with disabilities has been through three historical eras. In the first era, referred to as extermination, the Greeks and the Romans killed newly born infants who were found to have physical deformities and severe form of mental retardation. In the second phase – ridicule, the physically handicapped and the mentally retarded were made court clowns and were used to entertain the privileged class. In the third phase - social conscience – which was during the Middle Ages, instead of ridiculing them, the church decided to put the disabled in asylums and accorded them humane and charitable care.
Treatment of persons with disabilities in Africa and other developing countries is not well acknowledged (Chitereka, 2010). A sub-regional training seminar on education for mentally retarded children held in Zimbabwe in June 1982 revealed that services for mentally retarded children are less developed in some African counties. As pointed by Anderson (2004), persons with disabilities in developing nations of Africa face difficulties securing civil and educational rights, especially due to Cultural beliefs and attitudes which interfere with disabled persons’ becoming fully integrated into society. In Mauritius for instance, there are no provisions in government schools for children who have serious learning difficulties, but the possibility of initiating a trial programme is being considered. However, two privately administered special schools that are managed by APIEM (an association of parents of mentally retarded children) are available for mentally retarded pupils. The Mauritius Mental Health Association administers a special school for educationally subnormal children, which enrolls mildly to severely mentally retarded pupils.

A mentally handicapped child is one who has a limited level of intelligence and deficits in adaptive behavior. This condition usually arises between conception and 18 years of age (Republic of Kenya, 1995). A handbook on how to handle children with special needs goes on to note that mentally handicapped children are usually categorized according to severity of mental impairments as mildly, moderately, severely, or profoundly handicapped; or as educable, trainable, severe, and profound in terms of their measured intelligence scores on IQ tests (Republic of Kenya 1995). The classifications of educable and trainable are referred to by other authors (Bernie-Smith, et. al., 1998). It would appear that the definition of mental retardation used in Kenya has some parallels
with the American-based Individuals with Disabilities Education Act, 2008 (IDEA) definition used in the United States.

Under IDEA mental retardation is defined as significantly sub-average general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period (Grossman, 1983) that adversely affects a child’s educational performance. Significantly sub-average intellectual functioning is defined as a score that is at least two standard deviations below the mean on a test of intelligence. Based on the American Association on Mental Retardation and the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1994) and using intelligence (IQ) test scores, mental retardation occurs on the four levels of mild (score 50 through 55 to approximately 70), moderate (score 35 through 40 to 50 through 55), severe (score 20 through 25 to 35 through 40), and profound (20 through 25) (Grossman, 1983).

Given that their condition is in most cases never identified or recognized as a disability, children with mild mental retardation in Kenyan schools are educated with students without disabilities in regular schools and classrooms with no supports, adaptations, or modifications (Mutua & Dimitrov, 2001). Students with moderate to severe forms of mental retardation are educated mainly in units in regular education schools and in special schools and residential settings for children with mental retardation (Kiarie, 2006). It is not clear whether students with mental retardation are able to cope in regular classrooms, and how their teachers cope with the teaching and learning challenges experienced. This study therefore aims at establishing factors influencing instructions
among intellectually challenged learners and find out the strategies employed by teachers in addressing experienced challenges.

1.2 Statement of the Problem

This study addressed factors influencing instruction among intellectually challenged learners in Maara district. In Maara district there are 9 special unit schools for learners with mental retardation catering for 150 pupils. Statistics from Maara District Education Office show that over the years, learners who are intellectually challenged have not been adequately catered for in terms of availability of physical resources and poor social interaction. This is an indication that there are barriers that limit the teaching and learning process in the schools with special units. Learners who are intellectually challenged are expected to benefit from comprehensive long-term services which empower them to be more active, productive, and independent, which equally benefits their families and communities. This notwithstanding, today’s learners who are intellectually challenged are confronted with several challenges in life, which may hinder effective learning. Apart from coping with the trauma of a disability which may be mild, moderate, severe or profound, the learner may find it difficult to access and afford several facilities and services while attending school. The absence of significant facilities and services could severely limit independence, geographical mobility, and social interactions with teachers and other learners. As was the case in the United States before the enactment of the Education for all Handicapped Children Act (Ryndak & Alper, 1996), it is very likely that majority of children with profound mental and other disabilities do not receive any educational services in Kenya. These are the children and youth most likely to be denied access to the schools as they are deemed unlikely to benefit from any education or be
hidden away by their parents (Dorothy, 2003). It is therefore important to determine factors influencing instructions among intellectually challenged learners in special units. Identifying factors influencing teaching and learning among learners who are intellectually challenged would benefit the teachers in special units to devise research-supported strategies to improve educational outcomes of the children.

1.3 Purpose of the Study

The purpose of the study was to find out factors influencing instruction among intellectually challenged learners in Maara district. The study sought to determine the effects of attitudes of teachers and parents toward education of learners who are intellectually challenged and the challenges related to integration of such learners in regular schools.

1.4 Research Objectives

The objectives were to:

1. Determine the teacher factors influencing learning of learners who are intellectually challenged in Maara district.

2. Investigate how parental factors influence the education of learners who are intellectually challenged.

3. Establish learners’ factors influencing education of learners who are intellectually challenged.

4. Establish strategies that can be employed to improve teaching and learning of learners who are intellectually challenged.
1.5 Research Questions

The study sought for answers to the following research questions:

1. What are the teacher factors that influence learning of learners who are intellectually challenged in Maara district?

2. What are the parental factors that influence the education of learners who are intellectually challenged?

3. What are the learners’ factors influencing education of learners who are intellectually challenged?

4. What strategies could be employed to improve teaching and learning of learners who are intellectually challenged?

1.6 Significance of the Study

The study may help the society to understand the educational challenges faced by children who are intellectually challenged and how to handle some of these challenges. The information may also be utilized by the Maara District Education office to perform an evaluation of inclusion so that it can be a successful program. The study may be useful to the policy makers who would be guided by the results of this study in budgeting for the change and also start marketing education for learners who are intellectually challenged to organizations that fund and support education in this country. The results of the study may also help to improve programme design and implementation ofinclusive education, daily procedures, pre-service and in-service teacher training and support services. The study may add knowledge to the existing body on education of learners who are intellectually challenged, special education and inclusive education.
1.7 Limitations and Delimitations

1.7.1 Limitations
Due to financial constraints and time set to complete the study, the study was carried out in Maara District only. For a more conclusive result many rural and urban Districts should be studied. However this is not possible due to financial and other logistic constrains such as time and accessibility to the researcher. It would also not be possible to cover the opinions of the children who are intellectually challenged because they may not be in a position of giving reliable information. The researcher however made every effort to ensure that the schools are a good representation of others. Within Maara district, the study covered only public primary schools having special units for learners with mental disabilities.

1.7.2 Delimitations
The study sought to find out factors influencing instructions among intellectually challenged learners in special units in Maara district, Tharaka Nithi County. The study sample comprised of 30 parents of learners who are intellectually challenged, 9 teachers of those learners and County director of Education, Maara District. The study only investigated on teacher related factors, parent related factors and learner related factors that influence learning of learners who are intellectually challenged.

1.8 Assumptions of the Study
The study was based on the assumptions that attitude of teachers and parents affect the teaching of the children with mental disabilities. School headteachers were co-operative enough to enable the researcher carry out the study in their institutions. Parents willingly
gave information relating to their children with mental retardation without feeling restrained due to existing stigma associated with the condition.

1.9 Theoretical Framework

The study was based on the theory of Zone of Proximal Development (ZPD) as proposed by Lev Vygotsky (1978). The major theme of Lev Vygotsky’s theoretical framework is that social interaction plays a fundamental role in the development of cognition. Lev Vygotsky (1978) states that: “Every function in the child’s cultural development appears twice: first, on the social level, and later, on the individual level; first, between people (inter-psychological) and then inside the child (intra-psychological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relationships between individuals”. (p57). Thus, according to Lev Vygotsky, the aetiology of learning is social interaction: a concept is first presented to a child socially (inter-psychologically) either by parent, peer, or teacher, later to appear inside the child through the process of internalisation. As such, educators must strive to promote social interactions that are as conducive to learning as possible.

A second aspect of Lev Vygotsky’s theory is the idea that the potential for cognitive development depends upon the Zone of Proximal Development (ZPD): a level of development attained when children engage in social behavior. Full development of the ZPD depends upon full social interaction. The range of skills that can be developed with adult guidance or peer collaboration exceeds what can be attained alone. Lev Vygotsky’s theory is an attempt to explain consciousness as the end product of socialization. For example, in the learning of language our first utterances with peers or adults are for the
purpose of communication but once mastered they become internalized and allow inner speech.

Chaiklin, (2003) has cited Lev Vygotsky’s theory of Zone of Proximal Development (ZPD) as the most influential theory of the 21st century in understanding how children learn. Lev Vygotsky’s theory recognizes important links between language and communication and cognitive developments and emphasizes the social nature of learning. Lev Vygotsky believes that the basis of learning lays in the interaction children have with others and argues that they (children) reach higher levels of achievement when supported by adults or more experienced children. The theory thus emphasizes the importance of support for learning. Support and help of more experienced others helps the child to move into his/her ZPD.

Researchers such as Dahms, Geonnotti, Passalacqua, et al. (2008) are in support of this theory and described it as akin to ‘scaffolding’ using the image of scaffolding to support the child’s learning until it is firmly in place and then removing the scaffold bit by bit. The theory has been used to explain teaching and learning among learners with learning disabilities, mental disabilities, and gifted learners (Chaiklin, 2003).

The theory of Zone of Proximal Development (ZPD) is applicable to the study of factors influencing instructions among intellectually challenged learners in special units in Maara district. The theory assisted the study to understand theoretical argument behind social interaction between educators and learners with intellectual challenges. The theory emphasize that educators, parents, peers and caretakers of learners with intellectual
challenges must strive to promote social interaction that are conducive to learning as possible.

1.10 Conceptual Framework

The major goal of the study was to determine factors influencing instructions among intellectually challenged learners. Figure 1.2 gives the conceptual framework on the factors expected to influence learning of such learners.

**Figure 1.2: Conceptual Framework on factors influencing instructions among intellectually challenged learners.**

**Independent variables**

- **Teachers’ factors**
  - Level of training
  - Teaching methods
  - Motivation
  - Attitude

- **Parents’ factors**
  - Parent’s socio-economic status
  - Cultural practices
  - Parent’s attitude

- **Learners’ factors**
  - Learner interest
  - Attendance of lessons
  - Learner’s ability
  - Learners’ gender

**Dependent variables**

- Learning outcomes of learners who are intellectually challenged
  - Social skills

**Source:** Researcher (2012)

The study borrowed from Lev Vygotsky’s Theory of Social interaction. According to this theory social interaction plays a fundamental role in the development of cognition. As
such teachers, parents and learners must strive to promote social interactions to enhance effective learning of learners who are intellectually challenged. The independent variables of the study include teachers’ factors such as teaching methods, level of training in special education, motivation and attitude; parental factors such as socio-economic status, cultural practices and parent’s attitude; and learners’ factors such as learner interest, attendance of lessons, learner’s ability and learners’ gender. These factors are expected to influence the teaching and learning of learners who are intellectually challenged, which are the dependent variables of the study.

1.11 Summary of Chapter One

This chapter had captured background to the study, statement of the problem, purpose of the study, research objectives, research questions, significance of the study, limitations, delimitations and assumptions of the study. The chapter also looked at theoretical and conceptual framework. The next chapter looked at literature review on factors influencing instructions among intellectually challenged learners in special units in Maara district.
1.12 Definition of Terms

**Disability:** Is a condition that makes an individual unable to function normally in a particular socio-cultural context. It is a limitation to function as expected of a human being of a given age and sex (Funnell, Koutoukidis and Karen, 2008).

**Exceptional children:** Children who deviate from the average or normal child in mental, social, sensory, neuromuscular and physical characteristics (Ngiria, 2013).

**Inclusion:** This refers to the opportunity for persons with disability to participate fully in all of the educational, employment, consumer, recreational, community and domestic activities that typify everyday society (Inclusion International, 1995). This inclusion concept exposes the process of belonging, human beings feel important thrilled and happy when included and when they are excluded they feel incomplete, unhappy, lonely or troubled.

**Inclusive education:** Is the process of addressing learners’ needs within the regular school using all available resources to create opportunities to learn in preparing them for life. The emphasis is on reviewing schools and systems, and changing their curriculum adaptations, modification of environment and teaching strategies to suit children with special needs.

**Intellectually challenged:** A term used when a person has certain limitations in mental functioning and in skills such as communicating, taking care of him or herself, and social skills. These limitations will cause a child to learn and develop more slowly than a typical child. These learners are also labelled as mental retardation (The American Association on Intellectual and Developmental Disabilities (AAIDD), 2002).
Persons living with disabilities: Those who deviate from what society terms as normal children, in sensory abilities, mental, and/or physical characteristics. They require to an extent the modification of school practices or special education services in order to develop to their maximum capacities (Ngiria, 2013).

Regular school: A school for non handicapped children (normal learners) (Researcher’s Own)

Special Education: This is individually designed instructional service to meet the unique educational needs of disabled or handicapped persons (UNESCO, 1997).

Special schools: These are schools for those children with learning problems for example visual problems, hearing problems, mental retardation etc (Researcher’s own).

Special unit: This is a unit within a regular school for children with special needs (Researcher’s own).
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter gives a review of literature related to the study on the factors influencing teachers’ attitudes toward inclusive education in primary schools. The chapter covers literature on the following: teacher attitudes toward learners who are intellectually challenged, parental attitudes toward learners who are intellectually challenged, inclusion of learners who are intellectually challenged, methods used in teaching learners who are intellectually challenged and strategies to improve education outcomes for learners who are intellectually challenged.

2.2 Teacher factors related to education of Learners who are Intellectually Challenged

Teacher attitude is one of the most important variables in the education of children with disabilities (Parasuram, 2006). Consequently, Alghazo (2002) conducted a research to explore Jordanian teachers’ and administrators' attitudes, both male and female, toward persons with disabilities and toward inclusion of students with disabilities in the regular education classrooms. Before the implementation of any special education programs for students with disabilities within the public schools, it is important to determine the attitudes of educators and administrators towards persons with disabilities. The study uses a demographic survey, the Attitudes Towards Disabled Persons (ATDP) scale and the Mainstreaming Attitude Scale (MAS) to assess the attitudes of Jordanian educators and administrators towards persons with disabilities. The findings of this study show that educators' attitudes towards persons with disabilities in general were negative. Educators
also showed that they were more accepting of students with learning disabilities and least accepting of students with mental retardation. Also the findings revealed that educators', in general, had a negative attitude towards including students with disabilities in the regular education classroom.

Research suggests that teachers’ expectations affect the way they behave and, in turn, their behaviour influences how well students learn (Good & Brophy, 2000). Wilczenski (1995) cited in Booth and Ainscow (2002), conducted a study in Australia on teacher attitudes towards inclusive education. He found that teachers were more positive about students whose programmes focused on social inclusion than those requiring physical changes in their school or classroom. The teachers were also more accepting to students with physical disabilities than to those who necessitated academic modifications. Such research findings indicate that the type of disability and the demands it eventually makes on the teacher will influence teacher attitudes towards including a child with such a disability in a regular class. A study done by Peresuh and Ndawi (2001) in Canada argued that countries of the south lack financial, human and material resources to effectively provide educational and related services to learners with visual and hearing impairments.

The existing literature demonstrates that some educators understand and believe that students with disabilities have the right to be educated equally with their non-disabled peers (Harvey, 1992). Yet the educators' attitudes towards inclusion are negative and therefore outcomes of inclusion are affected (Forlin & Cole, 1993). A study conducted by Barnart and Kabzems (1992) in Zimbabwe showed that educators felt negative about inclusion and 40% of their sample noted that they would not accept students with an mental retardation if placed in their classroom.
Disruptive behaviour affects teachers’ attitudes toward inclusion (Forlin & Cole., 1993). Cant (1994) reported that teachers in Alberta, Canada were more reluctant to accept students with psychotic behaviour because they considered themselves inadequately trained to deal with such problems. Thus teachers are more rejecting of students with behavioral, emotional or mental retardation than they are of any other category. Further, Jobe, Rust, & Brissie, (1996) showed that teachers were more eager to make accommodations for students with physical disabilities compared to those with mental, emotional, or behavioural problems.

Positive attitudes among special education teachers also appear to be necessary for successful education outcomes for learners with disabilities. These professionals represent certified roles dedicated to meeting the needs of students with disabilities. They have received specialized training, are assumed to have special educational skills necessary for effectively working with such students, and are frequently seen as knowledgeable advocates for students with disabilities. Hence, special educators are in a unique position to shape school wide attitudes towards learning of children with disabilities. Fox and Ysseldyke (1997) reported that special education teachers are relied on to convince general education teachers of the philosophy of supporting education for learners with disabilities. Special education teachers also directly influence the educational outcomes of children with disabilities by delivering instruction in inclusive classrooms and providing guidance to other direct service providers in inclusive settings through consultation and collaboration. Given the lack of requisite expertise, training, and recourses reported by general education teachers (Scruggs & Mastropieri, 1996), special
education teachers are often sought as experts to take responsibility for and lead the day-to-day implementation of inclusion reforms (Fox & Ysseldyke, 1997).

According to Kuester, (2000) and powers (2002), training in the field of special education appears to enhance understanding and improve attitudes regarding inclusion. Inadequate training relating to inclusive education, may result in lowered teacher confidence as they plan for inclusive education (Schumm, Vaughn, Gordon, & Rothlein, 1994; Whitworth, 1991). Teachers who have not undertaken training regarding the inclusion of students with disabilities, may exhibit negative attitudes toward such inclusion (Van Reusen et al., 2001), while increased training was associated with more positive attitudes toward the inclusion of students with disabilities.

2.3 Parental factors related to Education of Learners who are Intellectually Challenged

The existing literature indicates that there is a wide range of opinion amongst parents related to the education of children with mental retardation. Some parents prefer and advocate for inclusive placement, while others favour separate placement (Grove & Fisher, 1999). As the trend towards inclusion grows, one of the chief concerns of parents is the protection of support services for their child. Daniel and King (1997) found that parents were more concerned about the degree to which their child’s individual education plan actually addressed the needs of their child when the child was being educated in an inclusive setting, as opposed to a segregated setting. It may be difficult for parents to find schools with personnel who are sufficiently knowledgeable about inclusive educational goals in order to provide appropriate services to their child (Grove & Fisher, 1999).
Grove and Fisher (1999) also found that the parents in their study viewed staff as lacking in knowledge about their child, and they found it difficult to access teachers or other staff willing both to provide them with information and receive information from them. Even when such a person is available, conflict can arise from divergent perspectives about the child’s needs (Lake & Billingsley, 2000).

Govender (2002) examined attitudes of parents towards their mentally retarded children in rural areas of Zululand. The study sample was obtained from a local hospital, a clinic and a special school for the mentally retarded in the Zululand area. The findings of this study revealed that parents in rural areas of Zululand have positive attitudes towards their mentally retarded children. There were no differences between the attitudes of mothers and fathers with both parents having more positive attitudes. This study further revealed that parents in rural areas of Zululand loved and accepted their mentally retarded children. However, the majority of parents were found to be disappointed by having a mentally retarded child and expressed feelings of embarrassment.

Palmer, Borthwick-Duffy, Widaman and Best (1998) found that parents of children with severe disabilities, who met the following criteria, had positive attitudes towards educating their children in regular schools. First, the parents saw socialisation as an important educational goal. Second, their child had relatively higher cognitive skills, had fewer behavioural problems and had fewer characteristics requiring special education. Finally, their child had had more time in regular classrooms. Using data from the Palmer et al. (1998) study, Palmer, Fuller, Arora and Nelson (2001) analysed the comments of 140 parents of students with severe disabilities who were in special education settings to identify the reasons for their support of, or resistance to, inclusive education. Positive
affirmations about inclusive practices provided by about half of the parents revealed that they believed their children would enhance their achievement and develop improved functional skills due to higher expectations and additional stimulation in regular classrooms.

In her study of the reactions of Black, Hispanic, and White mothers to having a child with handicaps, Mary (1990) found that almost all mothers reported strong feelings for their child immediately after receiving the news of the disabling condition. The most commonly expressed negative emotion was a feeling of grief or sorrow, which had lessened over time. There were also reports of the negative feeling of shock and guilt which had also lessened over time. The mothers that reported considering suicide were mothers of children with severe retardation. The study also revealed that Hispanic mothers reported an attitude of self-sacrifice towards the child and greater spousal denial of the disability more often than did the other mothers. Both Hispanic and White mothers often reported stages of reaction from strong negative feelings to later periods of adjustment. Overall the study revealed a common and universal reaction of love and sorrow across cultures and level of retardation.

Davis, Oliver, Tang and Wu (2000) state that generally people in Western countries tend to possess more accurate information, demonstrate more positive attitudes, show more social acceptance, and are more supportive of the integration of people with mental retardation (p.75). However, they state that Asians tend to hold more moralistic, individualistic and fatalistic views of the condition. They quote an example from Chen and Tang (1997) and Cheung and Tang (1995) that in Chinese societies having a offspring with mental retardation is regarded as a form of punishment for parents
violation of Confucian teachings, such as dishonesty, misconduct, or filial impiety. It is believed that the families, rather than the societies, should bear the full responsibility of these people. However, according to Cheung and Tang (1997) as cited in Davis et. al., (2000), Chinese families often engage in either avoidance coping strategies, such as wishful thinking, denial, and social withdrawal, or appeal to supernatural power to deal with the situation and reject social integration of these family members to minimize the stigma attached to mental retardation.

Concerns about socialisation were also expressed by parents in a study conducted by Freeman and Alkin (2000), who investigated parents’ attitudes to socialisation and inclusion. Parents who participated in that study believed that students with severe disabilities who were included in regular classroom settings would be rejected socially. Even when parents believed inclusion to have beneficial social implications, they still maintained that those with severe disabilities would be rejected.

2.4 Learners factors that influence Learners who are Intellectually Challenged

Given that their condition is in most cases never identified or recognized as a disability, children with mild mental retardation in Kenyan schools are educated with students without disabilities in regular schools and classrooms (Mutua & Dimitrov, 2001), with no supports, adaptations, or modifications. Students with moderate to severe forms of mental retardation are educated mainly in units in regular education schools and in special schools and residential settings for children with mental retardation (Kiarie, 2006; Mutua & Dimitrov, 2001). Whether they are in the units, special schools, or residential settings, their educational services are specialized in that they do not follow the academic curriculum. Services for these individuals in specialized settings date back to 1948 when
two schools, later merged into the Jacaranda Special School, were established (Kiarie, 2006). Programs for these students have continued to grow as enrolment has continued to increase.

Students included in the general education classroom could be identified as having learning disabilities, attention deficit hyperactivity disorders, emotional or behavior disorders, communication disorders, hearing impairments, visual impairments, and/or physical disabilities. Students with disabilities could experience problems reading, writing, math, spoken language, attention, memory and cognition, social-emotional, motivation, and meta-cognition (Hallahan and Kauffman, 2000). Although impossible to generalize across disabilities, students included in the general education classroom typically require meaningful curricular and instructional accommodations and adaptations in order to succeed academically.

2.5 Methods used in Teaching Learners who are Intellectually Challenged

Some comparison studies have focused on the differences in the teaching strategies and interventions used by general and special education teachers, and this literature consistently shows differences. For instance, Hocutt’s (1996) study compared teacher planning and adaptation for students with learning disabilities, found that general educators preferred to use manipulative and audiovisual activities, while the special educators preferred detailed intervention programs designed for special education students, for example, direct instruction and cognitive strategy instructions. (Direct instruction and cognitive strategy instructions are described later in this article, in the section on inclusion efforts.) Another study of instruction for children with educable mental retardation (EMR) in general and special settings found that special educators
showed more flexibility in selecting strategies with which to manage and monitor the classroom (Hocutt, 1996).

Education should develop the whole child and cultivate all of the skills, attitudes, and knowledge necessary for successful integration into society. Schools should provide students with opportunities to discover, model, experience, and learn consequences. This is true for all populations of learners, both with and without disabilities; but it is especially true for students with developmental disabilities, because they often have difficulties with social, emotional, communication, motor, and behavioral development, in addition to academic learning (Alper & Ryndak, 1992).

A meta-analysis of studies on teaching students with mental or developmental disabilities by Joseph and Konrad (2009) revealed a number of studies determining the outcomes of various teaching methods on learning among children with mental retardation. These studies revealed that students with mental or developmental disabilities benefited from writing instruction (e.g., developing plans and composing lengthy text) (Joseph & Konrad, 2009). This was significant from a research-to-practice perspective. Among these studies, strategy instruction was the predominant method of teaching writing skills to students with mental or developmental disabilities. This appears to be consistent with research on writing instruction for students with learning disabilities and those without disabilities (e.g., Bui et al., 2006; Wong, Butler, Ficzere, & Kuperis, 1996).

However, there are far more published experimental studies on teaching writing to students with learning disabilities and those without disabilities (Gersten & Baker, 2001) than there are for students with mental or developmental disabilities. Among strategy
instruction approaches to teaching writing to students with learning disabilities, the self-regulated strategy development (SRSD) model appears to permeate the literature (Graham & Harris, 2005). Similarly, the review by Joseph and Konrad (2009) found that SRSD was the most frequently used strategy instruction approach for students with mental or developmental disabilities. Among various types of instruction that were reviewed, strategy instruction yielded the strongest writing performance outcomes for students with mental or developmental disabilities. Measures of writing quality/accuracy were the most frequent outcome variable followed by productivity across the studies that were reviewed. Fewer investigations assessed whether prewriting tasks (e.g., planning) occurred (Joseph & Konrad, 2009).

Among approaches recommended for effective teaching for learners with mental retardation is Dr. William Glasser’s choice theory and quality schools concepts. His non-coercive instructional techniques were developed in a special education setting and are currently being successfully used in inclusive classrooms in several of Dr. Glasser’s quality schools (Glasser, 2006). In his review of the research on the subject of effective teaching, Westwood (2003) found that in the context of teaching in regular schools, effective teachers tend to: have well managed classrooms; provide students with the maximum opportunity to learn; maintain an academic focus; have high expectations of what students can achieve; adopt a style that is business-like and work-oriented; show enthusiasm; use strategies to keep students on task, motivated, and productive; impose structure on the content to be covered; present new material in a step-by-step manner; employ direct and explicit instructional procedures; use clear instructions and explanations; demonstrate appropriate task-approach strategies; monitor closely what
students are doing; adjust instruction to individual needs; re-teach when necessary; provide frequent feedback to students; use a variety of resources; and spend a significant amount of time in interactive, whole-class teaching (Westwood, 2003).

While good instructional design and teaching can minimize the need for adaptation, sometimes the only way to provide for children with special needs is to adapt curriculum to accommodate them (Loreman et. al 2005). In addition, to examining effective teaching practices that have been found to be productive in regular classrooms, there is need to also identify approaches specifically designed for special needs; mental, emotional or physical challenges.

Experts also stress the importance of professional collaboration in education in general and in the special education setting in particular. For instance, award-winning special education teacher Pat Beckman, states that special education students are most likely to succeed academically when “responsibility for the learning outcomes of special education students is equally shared by the classroom teacher and the special education teacher” and when instruction incorporates variation in delivery, activities, expectations, and assessment to accommodate diverse learning strengths and needs (Beckman, 2000).

2.6 Strategies to Improve Education Outcomes for Learners with Mental Retardation

While there are a growing number of efforts to conceptualize how to gain access to the general curriculum for students with disabilities, few of these have addressed the needs of learners with mental retardation and other cognitive disabilities (Wehmeyer, Lance & Bashinski, 2002). Wehmeyer, Lattin, and Agran, 2001) introduced a decision-making
model to enable Individualized Education Program (IEP) teams to make curriculum decisions pertaining to the educational program of students with mental retardation that takes into account both the general curriculum and a student’s unique learning needs. However, making a decision about the student’s formal curriculum is only one step in achieving the outcome that students with mental retardation both have access to and progress in the general curriculum. This article presents a multi-step process and multi-level model to gain access to and promote progress in the general curriculum for students with mental retardation and intensive support needs. Wehmeyer, Sands, Knowlton, and Kozleski (2002) identified five action steps to ensure that students with mental retardation progress in the general curriculum, listed in Table 2.1.

Table 2.1: Steps to Gaining Access to the General Curriculum for Students with Mental Retardation

<table>
<thead>
<tr>
<th>Action step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Setting and Curriculum Design</td>
<td>Standards are written as open-ended and the curriculum is planned and designed using principles of universal design that ensure that all students can show progress.</td>
</tr>
<tr>
<td>Individualized Educational Planning</td>
<td>The individualized planning process ensures that a student's educational program is designed based on the general curriculum, taking into account unique student learning needs.</td>
</tr>
<tr>
<td>School-wide Materials and Instruction</td>
<td>There is school-wide use of universally designed curricular materials and high quality instructional methods and strategies that challenge all students.</td>
</tr>
<tr>
<td>Partial School and Group Instruction</td>
<td>Groups of students who need more intensive instruction are targeted and building and classroom instructional decision-making activities focus at the lesson, unit, and classroom level to ensure students can progress in the curriculum.</td>
</tr>
<tr>
<td>Individualized Interventions</td>
<td>Additional curricular content and instructional strategies are designed and implemented to ensure progress for students with learning needs not met by school-wide efforts or partial school efforts.</td>
</tr>
</tbody>
</table>

Wehmeyer, Lance & Bashinski (2002) state that the key elements of this approach, referred to as the multi-level model for gaining access to the general curriculum, involves 3 levels of action (planning, curriculum, and instruction), 3 levels of the scope of instruction (whole school, partial school, and individualized), and 3 levels of curriculum modifications (adaptation, augmentation, and alteration).

**Step 1: Curriculum Planning and Design:** The standards-based reform movement emphasizes the establishment of high standards and the alignment of curriculum and assessment with those standards. Thus, ensuring access to the general curriculum for students with mental retardation must begin with the curriculum planning and design process and the development of state and local standards. If students with widely varying skills, backgrounds, knowledge and customs are to progress in the general curriculum, the standards upon which the curriculum is based, as well as the curriculum itself, must embody the principles of universal design, discussed in greater detail subsequently, and be written to be open-ended and inclusive, not close-ended. The terms open- and close-ended refer to “the amount of specificity and direction provided by curriculum standards, benchmarks, goals or objectives at both the building and classroom levels” (Wehmeyer, Sands, et al., 2002).

**Step 2: Individualized Educational Planning:** The education of students with disabilities has always emphasized the importance of individualized planning, a value that should not be abandoned when focusing on the general curriculum (Wehmeyer, Lance & Bashinski, 2002). When considering a student’s formal curriculum, it may be that some students can progress on portions of the general curriculum without accommodations or curriculum modifications and as such that portion of the general
curriculum will be the “most appropriate” formal curriculum. It is likely, however, that most students with mental retardation or developmental disabilities will need some accommodations or modifications. To achieve that, the individualized education program team is first encouraged to consider how assistive technology can accommodate for student limitations and can enable the student to progress without curriculum modifications. Once assistive technology has been considered, teams consider three levels of curriculum modifications (Wehmeyer, Sands, Knowlton & Kozleski, 2002).

The first is curriculum adaptation, which refers to efforts to adapt the curriculum’s presentation and representation or the student’s engagement with the curriculum (as discussed subsequently). A second level of modification is curriculum augmentation, where additional content is added to the curriculum to enable students to progress. Such efforts typically include teaching students additional ‘learning-to-learn’ or self-regulation strategies that, in turn, enable students to progress more effectively in the curriculum. Neither of these levels of curriculum modification changes the general curriculum content. The third level, curriculum alteration, does change the general curriculum to add content specific to students’ needs, which might include traditional functional skills or other needed skills not in the general curriculum. This also, presumably, necessitates the elimination of content in the general curriculum. For many students with mental retardation, the third level of curriculum modification (e.g., alternative curriculum) is where planning begins, but if students are to maximally benefit from and progress in the general curriculum, individualized education program teams need to consider accommodations and curriculum adaptations and augmentations before considering alternative curricula. It is also evident that if the general curriculum is broad enough to
cover functional areas, that will limit the need to move to an alternative curriculum (Wehmeyer, et al. 2002).

**Step 3: School-wide Materials and Instruction:** In the United States of America, the 1997 amendments to the IDEA emphasized school-wide interventions to provide greater access for all students. School-wide interventions are, quite simply, those that are implemented throughout the school campus and which benefit all students. With regard to students with mental retardation gaining access to the general curriculum, there are three school-wide interventions that warrant consideration.

During the course of any given school day, a teacher will utilize a variety of instructional groupings or arrangements (e.g., whole class instruction, teacher-directed small group instruction, cooperative learning groups, peer-directed instructional activities, independent seat work) through which to present lesson content. For students with mental retardation, whole-class and independent seat work arrangements often pose the most problems (Udvari-Solner, 1993). Large group instruction and independent seatwork require all students to maintain attention over extended periods of time, interact only passively with the information to be learned, and to self-reliantly receive and process information that is presented in the same manner. To increase the likelihood that students who have mental retardation will truly have access to the general curriculum, teachers should be encouraged to diversify their selection of instructional arrangements and not rely solely on these two strategies.

**Step 4: Partial School or Group Instruction:** Even when school-wide efforts are in place, there will be students who do not progress without additional supports. The next
level of intervention is at the group level, where more targeted interventions are designed and implemented for smaller groups of students. This includes classroom-level instructional decisions that focus on lesson and unit design so that all students in the class will progress, as well as specific learning experiences for groups of students. In order to adhere to school behavior rules, for example, 9 grade students who recently transitioned to high school might need specific opportunities to learn what is expected of them when going from class to class ((Wehmeyer, et al. 2002).

**Step 5: Individualized Interventions:** For a small group of students, including many students with mental retardation, there will be a need to design highly individualized and intensive interventions to enable them to succeed. This is also the group that will likely need alternative curriculum options. However, these students should also be involved in school-wide interventions and engaged in learning activities driven by the general curriculum.

**2.7 Summary**

The chapter has reviewed literature that shows the challenges faced by learners who are intellectually challenged. The literature review shows that teacher attitudes toward learners who are intellectually challenged can influence the learning of these children. However it is not clear how these attitudes influence the learning of children who are intellectually challenged. This study therefore sought to find out the ways in which teachers’ attitudes affect the learning of learners who are intellectually challenged. Further this study also sought to show ways in which parental attitudes affect the learning outcomes of the learners, since this is not brought out in the literature review, this study therefore sought to establish whether the curriculum and instruction strategies pointed out
in the literature review have been implemented in schools in Tharaka Nithi district and whether they have been effective in improving education outcomes for learners who are intellectually challenged. It has also emerged that parental attitudes toward learners who are intellectually challenged can affect the learning outcomes of the learners. The literature review has also shown the curriculum and instruction strategies that can be used to improve education outcomes for learners who are intellectually challenged. As noted by Wehmeyer, Lance & Bashinski (2002), although there are a growing number of efforts to conceptualize how to gain access to the general curriculum for students with disabilities, few of these have addressed the learning needs of learners who are intellectually challenged. Consequently, this study sought to examine factors influencing instructions among intellectually challenged learners in special units in Maara district.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction
This chapter presents the procedures that were used to conduct the study. It focuses on research design, target population, sample and sampling procedures, research instruments, data collection, data analysis and ethical considerations.

3.2 Research Design
The study employed a descriptive survey design to investigate factors influencing instructions among intellectually challenged learners in special units in Maara District. Descriptive survey designs are used in preliminary and exploratory studies to allow researchers to gather information, summarize, present and interpret for the purpose of clarification (Orodho 2002). Borg and Gall (1989) noted that descriptive survey research is intended to produce statistical information about aspects of education that interest policy makers and educators. The design fits in the study because the researcher will not manipulate any variables (Gay, 1992). The researcher also found the design appropriate since the information obtained was used to explain the current state of affairs among intellectually challenged learners in special units in Maara districts.

3.3 Study variables
The independent variables of the study are teachers’ factors, parental factors and learners’ factors. These factors are expected to have an influence on teaching and learning processes among learners who are intellectually challenged which is the dependent variable.
3.4 Study Location and Population

The study was carried out in public primary schools with special units in Maara District of Tharaka Nithi County, situated North East of Nairobi about 200 kilometers from Nairobi. The district is between Chuka in South Meru District and Igoji in Meru central. The district lies on an agriculturally rich area of Meru County endowed with small scale horticulture industry and cash crops such as tea and coffee. The researcher chose Maara District because she is familiar with this area and it is also a good presentation of the other districts. Maara District has a population of 22,995 pupils and 856 teachers for both regular and special unit schools. Included in the population are 150 pupils and 15 teachers from the 9 special unit schools in Maara District. The study only focussed on learners who are intellectually challenged. As such, the target population of the study was all 150 students and 15 teachers in the 9 special unit schools in Maara District. Table 3.1 shows the distribution of the target population.

Table 3.1: Population distribution of special school and units in Maara District

<table>
<thead>
<tr>
<th>Schools</th>
<th>No. of pupils</th>
<th>No. of teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maara Special school for MH</td>
<td>45</td>
<td>4</td>
</tr>
<tr>
<td>Igakiramba Special Unit for MH</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>Iruma Special Unit</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>Mutindwa Special Unit</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Ngeru Special Unit</td>
<td>19</td>
<td>2</td>
</tr>
<tr>
<td>Kiriani Special Unit</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>Karia-ini Special Unit</td>
<td>17</td>
<td>2</td>
</tr>
<tr>
<td>Magundu Special Unit</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Gitundu Special Unit</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>150</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>
3.5 Sampling Technique

For this study, the researcher used census sampling to include all the 9 special units for learners who are intellectually challenged. Census sampling refers to a technique that is used when the target population is small and hence study information is gathered from all the study respondents. According to Kothari (2004), when the universe is a small one, there is no need to resort to a sample survey. The special units in Maara district were only 9, thus eliminating the need for a sample survey.

3.6 Sample

A sample is a small portion of a target population. Sampling means selecting a given number of subjects from a defined population as representative of that population. Any statements made about the sample should also be true of the population (Orodho 2002). It is however agreed that the larger the sample the smaller the sampling error. From each of the 9 special unit schools in Maara district, one teacher for learners who are intellectually challenged was selected. In addition, 30 parents of learners who are intellectually challenged were selected using purposive sampling. The researcher also interviewed the County director of education for Maara District. Therefore the study sample comprised of 9 teachers, 30 parents and 1 County Director of Education, a total of 40 respondents.

3.7 Research Instruments

The main tools of data collection for this study were a semi-structured questionnaire and interview schedule. This method was chosen because it has a large coverage enabling the gathering of a large sample very inexpensively. It is also anonymous. Anonymity helps to
produce more candid answers than is possible in an interview. A semi-structured questionnaire was used in the study to collect data from teachers.

The teacher’s questionnaire comprised of four parts: part one included background information of the teachers; part two on their attitudes toward children who are intellectually challenged, part three on the state of school facilities and ability to cater for learners who are intellectually challenged; and part four on possible solutions for challenges facing learners who are intellectually challenged. An interview schedule was used to guide the researcher in conducting an interview with the area County Director of Education and the parents of children who are intellectually challenged.

3.8 Instrument Reliability

Mugenda and Mugenda (1999) define reliability as a measure of the degree to which a research instrument yields consistent results or data after repeated trial. The split-half technique of reliability testing was used to assess the reliability of the research instruments. A pilot study was conducted in one special schools in Maara District. The questionnaires were administered to the pilot sample respondents once, and the questionnaires were divided into two halves. After this a correlation was taken between the two halves to estimate the reliability of the questionnaires. The Pearson Correlation coefficient ($r$) was used to estimate the correlation coefficient of the two tests and a correlation coefficient ($r$) of 0.6571 was obtained. According to Gay (1992) any research instrument with a correlation coefficient of between 0.70 and 1.00 is accepted as reliable enough.
3.9 Instrument Validity

Validity is defined as the accuracy and meaningfulness of inferences, which are based on the research results (Mugenda and Mugenda, 1999). Face validity refers to the likelihood that a question will be misunderstood or misinterpreted, thus, the pilot study helped to iron out ambiguity. Pre-testing a survey is a good way to increase the likelihood of face validity. According to Borg and Gall (1989), content validity of an instrument is improved through expert judgment. Content validity refers to whether an instrument provides adequate coverage of a topic. Expert opinions helped to establish content validity (Wilkinson, 1991). The researcher sought assistance of research experts, experienced graduates, lecturers and experienced supervisors in order to help improve validity of the instrument. They examined the questions in the questionnaires so as to find out if the questions were valid; such as if the wording is clear, if the questions are provoking or responsive or if the researcher is biased. That in turn increased the quality of the questionnaire and provide feedback to the researcher.

3.10 Piloting

Prior to visiting the schools for data collection, the researcher pre-tested the questionnaires using one school, specifically Kathangawe special unit which is in Meru South district. The pilot school was not included in the sampled schools. The purpose of the pilot study was to test the validity and reliability of the instrument, help identify any items in the questionnaire that were ambiguous or unclear to the respondents and change them effectively, and also enable the researcher to familiarize herself with administration of the instrument.
3.11 Data Collection Procedure

A research permit was obtained from the Kenyatta University graduate school. Thereafter another research permit from the National Council for Science and Technology was obtained, after which the researcher contacted the District Education Office Maara district before the start of the study. The selected schools were visited and the semi-structured questionnaire administered to the teachers. The researcher then conducted interviews with the parents and County Director of Education on the appointed dates. The respondents were assured that strict confidentiality would be maintained in dealing with the responses. The filled-in questionnaires were collected after one week.

3.12 Data Analysis

The researcher prepared a coding file to assign values to respondent answers on the questionnaire in order to determine factors influencing instructions among intellectually challenged learners in special schools in Maara district. The coded data was then entered in Statistical Package for Social Sciences for analysis. SPSS counter programme was used to separate mean scores, standard deviations, modes, frequencies and percentage. Qualitative analysis techniques were used to analyse the qualitative data emerging from interviews with parents and the County Director of Education. The descriptive statistics were used to describe teacher and parent factors towards learning of learners with mental retardation, teaching methods and respondent views regarding inclusion. Qualitative data was analyzed by coding responses to the interviews according to emerging themes and reporting the findings in accordance with research objectives.
3.13 Ethical Considerations

Before going to the field, the researcher obtained a research permit from National Council for Science and Technology, after which the researcher contacted the District Education Office Maara district before the start of the study. The researcher then sought informed consent of the respondents before administering the instruments and conducting interviews. Finally, the researcher ensured only the consenting respondents were involved in the study. The researcher also assured the respondents that the information they gave would be treated as confidential. This was achieved by instructing all the study respondents not to put their names in the questionnaires.

3.14 Summary of the Chapter

This chapter had focused on the process used to collect information and data for the purpose of making academic reports. The information captured included research design, target population, sample and sampling technique, research instruments, data collection, data analysis and ethical considerations. The following chapter presents the research findings.
4.1 Introduction

This chapter presents analysis and discussion of the results findings. The purpose of the study was to find out the factors influencing instruction among intellectually challenged learners in Maara district. The findings are presented based on the following bio data information and the research objectives.

i. Bio data information

ii. Determine the teacher factors influencing learning of learners who are intellectually challenged in Maara district.

iii. Investigate how parental factors influence the education of learners who are intellectually challenged.

iv. Establish learners’ factors influencing education of learners who are intellectually challenged.

v. Establish strategies that can be employed to improve teaching and learning of learners who are intellectually challenged.

Data used for the study was collected from 30 parents of learners who are intellectually challenged, 9 teachers of those learners and County Director of Education, Maara District. The results of the study are presented using tables, pie charts and bar graphs which were then discussed on basis of literature reviewed.

4.2 Demographic Information of the Study Respondents

The information captured in this section includes teachers’ gender, age, academic qualification and their teaching experience. The section also presents parents’ gender,
academic qualifications and age of children who are intellectually challenged. The results of this analysis are presented in Table 4.1:

**Table 4.1: Respondents’ demographic data**

<table>
<thead>
<tr>
<th>Teachers’ gender</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>2</td>
<td>22.2</td>
</tr>
<tr>
<td>Female</td>
<td>7</td>
<td>77.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teachers’ Age in yrs</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>31-35</td>
<td>1</td>
<td>11.1</td>
</tr>
<tr>
<td>36-40</td>
<td>3</td>
<td>33.3</td>
</tr>
<tr>
<td>41-45</td>
<td>4</td>
<td>44.4</td>
</tr>
<tr>
<td>51 yrs and above</td>
<td>1</td>
<td>11.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teachers’ academic qualification</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2</td>
<td>1</td>
<td>11.1</td>
</tr>
<tr>
<td>P1</td>
<td>4</td>
<td>44.4</td>
</tr>
<tr>
<td>Diploma</td>
<td>3</td>
<td>33.3</td>
</tr>
<tr>
<td>B. Ed</td>
<td>1</td>
<td>11.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teaching experience</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
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<tr>
<td>6-10 yrs</td>
<td>2</td>
<td>22.2</td>
</tr>
<tr>
<td>11-15 yrs</td>
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<td>0.0</td>
</tr>
<tr>
<td>16-20 yrs</td>
<td>5</td>
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</tr>
<tr>
<td>21-25 yrs</td>
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</tr>
<tr>
<td>26 yrs and above</td>
<td>1</td>
<td>11.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parents’ gender</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>19</td>
<td>63.3</td>
</tr>
<tr>
<td>Female</td>
<td>11</td>
<td>36.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parents’ academic qualification</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>18</td>
<td>60.0</td>
</tr>
<tr>
<td>Tertiary</td>
<td>7</td>
<td>23.3</td>
</tr>
<tr>
<td>Secondary</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>Never been to school</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age of children with mental disability</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 6 yrs</td>
<td>6</td>
<td>20.0</td>
</tr>
<tr>
<td>6-12 yrs</td>
<td>14</td>
<td>46.7</td>
</tr>
<tr>
<td>13-18 yrs</td>
<td>9</td>
<td>30.0</td>
</tr>
<tr>
<td>19 yrs and above</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
As shown in Table 4.1, majority of the teachers were females. Gender difference in special schools could be explained by the popular belief that females are more compassionate than males and hence leading to more female teachers in special schools than male teachers. According to Lampropoulou and Padelliadu (1997) gender as a variable to investigate reactions to inclusive education, are often linked to cultural factors, with some cultures ascribing the care of students with disabilities to female teachers. In terms of age, 44.4% of the teachers were aged between 41 and 45 years, 33.3% were aged 36-40 years while the remaining one was over 51 years. This shows that majority of the teachers were aged between 36 and 45 years. In relation to academic qualifications, majority of teachers had attained P1 (44.4%) and Diploma qualifications (33.3%) and therefore were expected to be in a position of giving necessary services because of their training. The results in the table further indicates that 55.6% of the teachers had served in teaching for 16-20 years, 22.2% had served for 6-10 years while 11.1% had a teaching experience of 21-25 years. This was a clear indication that majority of the teachers had taught for a very long time to be in a position of giving factors influencing teaching/learning process of learners who are intellectually challenged. In addition to this, special teachers with long time experience were expected to have an influence towards learners’ academic progress.

Of the 30 parents who took part in the study, 63.3% of them were females while the remaining 36.7% were males. Among them, 60.0% had attained primary education, 23.3% had tertiary education while 23.3% had attained secondary education. Only 1 (3.3%) parent did not have any formal education. This finding indicates that majority of the parents with children who are intellectually challenged had attained primary
education. The findings in the table also showed that 46.7% parents reported that their children were aged between 6 and 12 years, 30.0% indicated that they were aged 13-18 years whereas a quarter of them reported that their children were below 6 years. This shows that most of the parents reported that their children who were intellectually challenged were aged between 6 and 18 years.

4.3 Teachers’ Factors Influencing Learning of Learners who are Intellectually Challenged

To address this objective, teachers’ were first asked to indicate whether they had ever been into contact with learners who are intellectually challenged and their willingness to accept them. Their responses are shown in Table 4.2.

Table 4.2: Teachers’ contact with learners who are intellectually challenged and their willingness to accept them

<table>
<thead>
<tr>
<th>Statements</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>Teachers’ contact with learners with mental disability</td>
<td>8</td>
<td>88.9</td>
</tr>
<tr>
<td>Teachers’ willingness to accept learners with mental disability</td>
<td>7</td>
<td>77.8</td>
</tr>
</tbody>
</table>

Table 4.2 shows that majority of the teachers have ever been into contact with learners living with mental disability. This indicates that most of the teachers were expected to be in a position of understanding diverse needs of learners with disabilities, therefore varying the teaching methods, pace in teaching, appreciation and motivation of all pupils. The major factors that made teachers to identify learners’ mental disability problem was; short concentration span in the class, difficulty in learning/writing, abstract thinking, lack
of interest in learning and also learners isolated themselves from others. However, 6 (66.7%) teachers reported that they accepted the learners immediately after realizing their problems while 3 (33.3%) stated that they did not accept them at first. This shows that majority of the teachers accepted learners with mental disabilities. In contrary with the findings, Alghazo (2002) found out that educators showed that they were more accepting of students with learning disabilities and least accepting of students with mental retardation.

In terms of their willingness to accept learners who are intellectually challenged, majority of the teachers said that they were willing to accept learners with mental disabilities in the class with only 22.2% of them reporting that they were not willing to accept them. However, among the 7 teachers who reported that they are willing to accept the learners in the class, majority (71.4%) of them stated that they also considered the severity of the disability. These findings were agreement with the results by Center and Ward (1987) who found out that while the majority of teachers expressed a generalised agreement with the policy of inclusion, when asked specifically about their own willingness to include students with particular disabilities within their classrooms, they were only willing to accept the inclusion of students with mild physical disabilities. They were reluctant to include students with more severe physical disabilities, or students with intellectual disabilities. This indicated that teacher support for inclusion varied with the severity of the disability (Rainforth, 2000; Scruggs & Mastropieri, 1996). Figure 4.1 presents teachers’ views on education system which benefit children who are intellectually challenged.
As shown in Figure 4.1, over 50.0% of the teachers felt that inclusive education was good among learners who are intellectually challenged while 44.4% of them were of the views that special education would benefit learners who are intellectually challenged. The results of the analysis revealed that atleast half of the teachers felt that children with disabilities would benefit from learning in a regular classroom, while their peers without disabilities gain from being exposed to children with diverse characteristics, talents and temperaments. This showed teachers positive attitude towards inclusion of learners with mental retardation in regular classes. In agreement with the findings, Ajuwon (2008) comments on the obvious benefits of the inclusive education paradigm, i.e. children are more likely to learn social skills in an environment that approximates to normal conditions of growth and development. It is also apparent that children with disabilities can function more effectively in an inclusive setting than in an isolated setting. Figure
4.2 illustrates teachers’ attitude towards inclusion of learners with mental disability in regular schools

![Bar chart showing teachers' attitude towards inclusion of learners who are intellectually challenged in regular schools]

**Figure 4.2: Teachers' attitude towards inclusion of learners who are intellectually challenged in regular schools**

Results in Figure 4.2 indicates that majority of the respondents were of the views that most of the teachers would have a negative attitude towards inclusion of learners who are intellectually challenged with 22.2% of them indicating that they would have positive attitude towards inclusion of learners with mental disability. These results indicate that majority of the respondents felt that teachers would have a negative attitude towards learners who are intellectually challenged. The findings were in line with Alghazo (2002) who found out that educators’ attitudes towards persons with disabilities was negative. Table 4.3 shows positioning of learners who are intellectually challenged in the class.
Table 4.3: Positioning of learners who are intellectually challenged in class

<table>
<thead>
<tr>
<th>Positioning of learners in class</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>At the back</td>
<td>5</td>
<td>55.6</td>
</tr>
<tr>
<td>Very close to me</td>
<td>3</td>
<td>33.3</td>
</tr>
<tr>
<td>Infront</td>
<td>1</td>
<td>11.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4.3 shows that majority of the teachers (55.6%) positioned learners who are intellectually challenged at the back. This shows that most of the teachers had developed a negative attitude towards learners who are intellectually challenged.

4.4 Parental factors influencing education of learners who are Intellectually Challenged

To answer this research objective, the researcher asked the parents to give their feelings towards children who are intellectually challenged and indicate whether they were attending school. In response, all the parents who were interviewed reported that their children who were intellectually challenged were attending schools. Table 4.4 shows parental attitude towards these learners.

Table 4.4: Parental attitude towards learners who are intellectually challenged

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative attitude</td>
<td>16</td>
<td>53.3</td>
</tr>
<tr>
<td>Neutral</td>
<td>10</td>
<td>33.3</td>
</tr>
<tr>
<td>Positive attitude</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4.4 shows that majority of the parents had a negative attitude towards learners who are intellectually challenged. This finding indicates that most of the parents had negative
feelings about children who are intellectually challenged. To confirm these results, County Director of Education reported that he/she usually encounter cases of parents mistreating their children in the district and also abandoning them. In line with the finding a research by United Nations Educational Scientific and Cultural Organization (UNESCO, 1994), expressed the views that parents of the handicapped children tended to feel ashamed of such children and therefore treatment they received was indifferent. Similarly, Govender (2002) examined attitudes of parents towards their mentally retarded children in rural areas of Zululand. The results of the analysis showed that majority of parents were found to be disappointed by having a mentally retarded child and expressed feelings of embarrassment. Figure 4.3 shows type of the school parents have registered their children in.

![Pie chart showing school type]

**Figure 4.3: School type**

As shown in Figure 4.3, three quarters of the parents reported that they had enrolled their children in special schools while quarter of them reported that their children were in regular schools. This result indicates that most of the parents preferred special schools in
comparison with the regular schools. Among the parents who preferred special school, 62.5% reported that teachers in special schools are trained on how to handle children who are intellectually challenged, 37.5% were of the view that children felt comfortable while interacting with others who have the same problems while 16.7% felt that children who are intellectually challenged could not cope in regular schools. However, among the six who preferred regular schools, the following were their justifications; children who are intellectually challenged would have an opportunity to socially interact with ‘normal’ children and teachers in regular schools were also trained on how to handle learners who are intellectually challenged.

To establish some of the factors that may influence parents preference of the school, the researcher asked the parents to indicate whether teachers in regular schools were able to handle learners who are intellectually challenged. Table 4.5 shows results of the analysis

<table>
<thead>
<tr>
<th>Capability of handling who are intellectually challenged</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>5</td>
<td>16.7</td>
</tr>
<tr>
<td>No</td>
<td>22</td>
<td>73.3</td>
</tr>
<tr>
<td>I don’t know</td>
<td>3</td>
<td>10.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

From Table 4.5, it can be observed that, among the 30 parents who took part in the study, over 70.0% were of the views that teachers in regular schools were not capable of handling learners who are intellectually challenged. This was a clear indication that parents had a negative attitude towards teachers in regular schools. Grove and Fisher
(1999) also found that the parents in their study viewed staff as lacking in knowledge about their child, and they found it difficult to access teachers or other staff willing both to provide them with information and receive information from them.

Table 4.6: Parents’ views on school type suited for children who are intellectually challenged

<table>
<thead>
<tr>
<th>School type</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special</td>
<td>24</td>
<td>80.0</td>
</tr>
<tr>
<td>Regular</td>
<td>3</td>
<td>10.0</td>
</tr>
<tr>
<td>Not sure</td>
<td>3</td>
<td>10.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4.6 shows that three quarters of the parents reported that children who are intellectually challenged would benefit more in special schools. These results indicate that there is a wide range of opinion amongst parents related to the placement of children in educational settings. Some parents prefer and advocate for inclusive placement, while others favour separate placement (Grove & Fisher, 1999). However, as the trend towards inclusion grows, one of the chief concerns of parents is the protection of support services for their child. Daniel and King (1997) found that parents were more concerned about the degree to which their child’s individual education plan (IEP) actually addressed the needs of their child when the child was being educated in an inclusive setting, as opposed to a segregated setting. As such, results of the analysis showed that most of the parents who took part in the study had negative attitude towards inclusive education system and therefore, preferred to take children who are intellectually challenged in special schools.
4.5 Learners Factors Influencing Education of Learners who are Intellectually Challenged

To address this objective, teachers were presented with 10 items measuring the influence of learner factors towards learning of pupils who are intellectually challenged. They were expected to indicate their agreement or disagreement levels on a 4-point likert scale. The scale ranged from 1 to 4, with one denoting strongly disagree, two representing disagree, three denoting agree and four strongly agree. The midpoint of the scale was a score of 2.5. Any score above 2.5 therefore denoted that respondent agreed with the statement while scores below 2.5 signified that respondent disagreed with the statement. Table 4.7 presents means and standard deviations obtained.
### Table 4.7: Learners factors influencing learning of pupils who are intellectually challenged

<table>
<thead>
<tr>
<th>Allowing children who are intellectually challenged to interact with normal children will........</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Increase the child’s circle of friends</strong></td>
<td>7</td>
<td>3.78</td>
</tr>
<tr>
<td><strong>Provide more opportunities for the other children benefit from the specialized instruction of the children with disabilities</strong></td>
<td>8</td>
<td>3.78</td>
</tr>
<tr>
<td><strong>Ensure that ‘normal’ children will be happy to play with the children who are intellectually challenged</strong></td>
<td>4</td>
<td>3.44</td>
</tr>
<tr>
<td><strong>Ensure that ‘normal’ children will be more appreciative of children living with disabilities</strong></td>
<td>4</td>
<td>3.33</td>
</tr>
<tr>
<td><strong>Develop a stronger feeling in the child of confidence in his/her academic ability</strong></td>
<td>4</td>
<td>3.22</td>
</tr>
<tr>
<td><strong>Make the child less well adjusted socially</strong></td>
<td>2</td>
<td>2.56</td>
</tr>
<tr>
<td><strong>Worsen the child’s learning problems</strong></td>
<td>2</td>
<td>2.22</td>
</tr>
<tr>
<td><strong>Limit the child’s level of academic performance</strong></td>
<td>2</td>
<td>2.00</td>
</tr>
<tr>
<td><strong>Have a negative effect on the social development of other children</strong></td>
<td>1</td>
<td>2.00</td>
</tr>
<tr>
<td><strong>Increase the amount of social rejection by the child’s peers</strong></td>
<td>0</td>
<td>1.89</td>
</tr>
</tbody>
</table>

**Key:** SA - Strongly Agree; A - Agree; D - Disagree; SD - Strongly Disagree
As shown in Table 4.7, the mean scores obtained by teachers ranged from 3.78 to 1.89. The highest ranked statements were allowing children who are intellectually challenged to interact with normal children will; increase the child’s circle of friends (3.78), provide more opportunities for the other children benefit from the specialized instruction of the children with disabilities (3.78) and ensure that ‘normal’ children will be happy to play with the children who are intellectually challenged. On the other hand, the lowest ranked statements were allowing children who are intellectually challenged to interact with normal children will increase the amount of social rejection by the child’s peers (1.89); have a negative effect on the social development of other children (2.00) and limit the child’s level of academic performance (2.00).

This shows that most of the teachers seemed to have no problem of including children who are intellectually challenged in normal classrooms. The results shows that majority of them were of the views that children who are intellectually challenged and those who were normal could socially interact with each other and also learn from each other. To verify these findings, the County Director of Education Maara district reported that including learners who are intellectually challenged in normal classroom helped them to develop a higher self esteem, create a social interaction with other children and also helps learner with disability to develop a higher confidence in academic ability. Inclusive education caters not only for educational needs, but is also solid social and moral arguments for it. It can lay the foundations of a more inclusive society where all people belong and where being different is accepted and valued as just part of humanity (Inclusive International, 1995).
4.6 Strategies that can be employed to Improve Teaching and Learning of Learners who are intellectually challenged

Training in any field is very crucial for the sake of gaining the skills/knowledge needed to perform the duties assigned to oneself. In addition, special education training is important to educators, since it helps them to be able to handle learners of all kinds whom they will encounter in their profession. In this view, the researcher first sought to establish from the study respondents whether there is any importance of training teachers to handle children with mental retardation. In response, 9 (100%) teachers reported that teachers’ training was very important in handling of children with mental retardation. In agreement with the findings, Kuester, (2000) and powers (2002) stated that training in the field of special education appears to enhance understanding and improve attitudes regarding inclusion. Inadequate training relating to inclusive education, may result in lowered teacher confidence as they plan for inclusive education (Schumm, Vaughn, Gordon, & Rothlein, 1994; Whitworth, 1991). Teachers who have not undertaken training regarding the inclusion of students with disabilities, may exhibit negative attitudes toward such inclusion (Van Reusen et al., 2001), while increased training was associated with more positive attitudes toward the inclusion of students with disabilities.

Effective support for children’s mental health and well being involves efforts to meet the social, emotional and learning needs of all the children. Table 4.8 presents ways in which children who are intellectually challenged can be helped in schools.
Table 4.8: Ways in which children who are intellectually challenged can be helped in school

<table>
<thead>
<tr>
<th>Ways</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoid discriminating the child</td>
<td>9</td>
<td>100.0</td>
</tr>
<tr>
<td>Focusing on the child ability and not disability</td>
<td>8</td>
<td>88.9</td>
</tr>
<tr>
<td>Support child’s confidence by emphasizing what he/she can do</td>
<td>7</td>
<td>77.8</td>
</tr>
<tr>
<td>Take them to a special school</td>
<td>6</td>
<td>66.7</td>
</tr>
<tr>
<td>Helping them to perform daily activities</td>
<td>3</td>
<td>33.3</td>
</tr>
</tbody>
</table>

As reflected in Table 4.8, all teachers reported that children who are intellectually challenged should not be discriminated while inside or outside the school, 88.9% of them felt that both parents and teachers should focus on learners’ ability while 77.8% indicated that school community should support children confidence by emphasizing what they can do. Six teachers suggested that children with special education should be registered in special schools whereas 33.3% of them stated that they should be helped to perform daily activities. Table 4.9 illustrates various ways in which children who are intellectually challenged can be fitted in regular classroom.
Table 4.9: Ways that can be done to fit children who are intellectually challenged in regular classroom

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foster acceptance and friendship</td>
<td>9</td>
<td>100.0</td>
</tr>
<tr>
<td>Have positive attitude towards the learner</td>
<td>8</td>
<td>88.9</td>
</tr>
<tr>
<td>Use various teaching aids to ensure content delivery to all children</td>
<td>7</td>
<td>77.8</td>
</tr>
<tr>
<td>Give support and encouragement</td>
<td>6</td>
<td>66.7</td>
</tr>
<tr>
<td>Give simpler tasks to the learner</td>
<td>5</td>
<td>55.6</td>
</tr>
<tr>
<td>Vary the teaching methods to meet the needs of every child</td>
<td>4</td>
<td>44.4</td>
</tr>
</tbody>
</table>

Table 4.9 shows that all the study respondents (9 teachers) suggested that schools should foster acceptance and friendship with learners with mental disability, 88.9% recommended that school community should have a positive attitude towards learners, 77.8% stated that teachers should use various teaching aids to ensure content delivery to all children and also give support and encouragement (66.7%). In addition to the above recommendations, the researcher sought to establish strategies that had been put in place in the district to improve the teaching and learning of learners who are intellectually challenged. To get this information, the researcher conducted an interview with the County Director of Education who reported that the district had; organized for the in-service training of all educators to improve their knowledge about ways of accepting and practicing inclusion of learners who are intellectually challenged in regular classes; introduced school feeding programmes to increase the access and retention of learners who are intellectually challenged and also organized meetings in the society to sensitize
parents and community as a whole on the importance of educating learners who are intellectually challenged.

4.7 Summary of the Chapter

From the study findings presented above, the study established that negative attitude among the school community was one of the major factors influencing instructions among intellectually challenged learners in Maara district. The major factors which led to development of negative attitude were mainly parental preference of the school, parental feelings about the child, parental attitude towards teachers, teachers’ willingness to accept learners who are intellectually challenged and teachers’ attitude toward inclusion of learners who are intellectually challenged in regular classrooms. This chapter finally concludes that to promote effective teaching and learning process among learners who are intellectually challenged, school community should develop a capacity building mechanism which would help to identify the problems and give out the solutions to solve those challenges. The following chapter gives summary of the findings, conclusion and recommendations of the study.
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction
This chapter presents summary, conclusion and recommendations of the study in relation to the four research objectives. It also gives areas for further research.

5.2 Summary of the Study Findings
The main objective of the study was to find out factors influencing instructions among intellectually challenged learners in special units in Maara district. Data for the study was collected from 30 parents of learners who are intellectually challenged, 9 teachers of those learners and County Director of Education, Maara District. The following is the summary of the findings:

5.2.1 Teachers’ Factors Influencing Learning of Learners who are intellectually challenged
From the results findings based on objective one, it emerged that the major factors influencing learning of children who are intellectually challenged were; willingness, acceptance and attitude. The results revealed that majority of the teachers were willing to accept learners who are intellectually challenged with two reporting that they were not ready to accept them. However, among the seven teachers who were willing to accept the learners in the class, over 70.0% of them stated that they considered the severity of the disability, meaning teachers’ support of inclusive education varied with the severity.
5.2.2 Parental Factors Influencing Education of Learners who are intellectually challenged

From the results based on the second objective, the study established that the major parental factors influencing learning of children who are intellectually challenged were; preference of the schools, feelings about the child and attitude towards teachers. The study found that majority of the parents had negative attitude towards learners who are intellectually challenged. More so, the results showed that quarter of the parents preferred regular schools while three quarters of them preferred special schools. Out of the 80.0% of the parents who preferred special school, majority reported that teachers in special schools are trained on how to handle children who are intellectually challenged, nine were of the view that children felt comfortable while interacting with others who have the same problems while four felt that children who are intellectually challenged could not cope in regular schools.

5.2.3 Learners’ Factors Influencing Education of Learners who are intellectually challenged

Regarding the third objective, the study found out that over 70.0% of the teachers approved that allowing children who are intellectually challenged to interact with normal children will; increase the child’s circle, provide more opportunities for the other children benefit from the specialized instruction of the children who are intellectually challenged and also help child to develop a stronger feeling in academic ability. This shows that special teachers felt that children who are intellectually challenged and those who were normal could socially interact with each other and also learn from each other.
5.2.4 Strategies that can be employed to Improve Teaching and Learning of Learners who are intellectually challenged

In relation to the fourth objective, the study established that to improve teaching and learning of learners who are intellectually challenged; schools should foster acceptance and friendship with learners who are intellectually challenged, school community should have a positive attitude towards learners, teachers should use various teaching aids to ensure content delivery to all children and also give support and encouragement.

5.3 Conclusion

Based on the findings of the study as summarized above, the following conclusions were made:

i. Willingness, acceptance, negative attitude among the school community is one of the major factors influencing teaching and learning among learners who are intellectually challenged in Maara district. The three factors lead to lack of awareness on the needs of a particular learner or the potential barriers which they may face.

ii. The major factors which lead to development of negative attitude were mainly parental preference of the school, parental feelings about the child, parental attitude towards teachers, teachers’ willingness to accept learners who are intellectually challenged and teachers’ attitude toward inclusion of learners with who are intellectually challenged in regular classrooms.

iii. Inclusive setting had a positive impact towards learners with disability and non disabled. The study concluded that both children with mental retardation and the ‘normal’ children could learn from each other and also socially interact with each
other. Education should develop the whole child and cultivate all the skills, attitude and knowledge necessary for successful integration into society. Schools should provide children with opportunity to discover, model, experience and learn consequences. This is true for all population of learners both with and without disability.

iv. The study finally concludes that to promote effective teaching and learning process among learners who are intellectually challenged, school community should develop a capacity building mechanism which would help to identify the barriers and give out the solutions to solve those challenges.

5.4 Recommendations

Following the four objectives of the study, the following recommendations were made:

i. Since the study findings revealed that teachers acceptance of learners who are intellectually challenged varied with the level of severity. The current study recommends that school principals, Quality Assurance and Standard Officers (QASOs) and Kenya Institute of Curriculum Development (KICD) should organize and support in-service training for all educators to improve their knowledge about ways of accepting, handling and practicing inclusion of learners with both mild and severe disabilities in regular classes.

ii. The study found out that some parents felt that teachers in regular schools were not trained on how to handle children who are intellectually challenged. The Ministry of Education through Teachers Service Commission should ensure that teachers in both special and regular schools are adequately equipped with skills to handle all cases of disability. This as a result would help to change parents’
negative attitudes towards integrating children who are intellectually challenged in regular classrooms and consequently viewed inclusive setting as a place where learners’ who are intellectually challenged can benefit in terms of academics, social interaction, development of positive self esteem, among others.

iii. The study established that most parents had negative attitude towards their children who are intellectually challenged. The study therefore suggests that County Director of Education officers should organize civic education to sensitize parents and community as a whole on the importance of educating learners who are intellectually challenged.

iv. To improve teaching and learning of learners who are intellectually challenged. The study recommends that Quality Assurance and Standard Officers should ensure that teachers use various teaching aids to ensure that they meet educational needs for every learner including those who are intellectually challenged.

v. Through interview, the County Director of education recommended that schools should introduce feeding programmes to enhance access and retention of learners who are intellectually challenged.

5.5 Areas for Further Research

i. Another study should be conducted to find out effects of inclusive education towards academic performance of learners who are intellectually challenged.

ii. A study should be carried out to investigate how community factors influence learning of children who are intellectually challenged.
REFERENCES


Hocutt, A. (1996), Effectiveness of Special Education: Is Placement the Critical Factor? Special Education For Students With Disabilities Vol. 6 No. 1


APPENDIX 1

QUESTIONNAIRE FOR TEACHERS

The purpose of this study is to find out factors influencing instructions among intellectually challenged learners in special units in Maara District. Please answer all the questions as required. The information you give will be handled with a lot of confidentiality. Your identity will not be revealed, and for these purposes, do not write your name on the questionnaire.

Instructions

Answer all the questions by ticking in the appropriate box or by filling in the information in the space provided.

PART ONE

1. What is your age? Please tick appropriately.
   - [ ] 20 – 25 yrs
   - [ ] 26 – 30 yrs
   - [ ] 31 – 35 yrs
   - [ ] 36 – 40 yrs
   - [ ] 41 – 45 yrs
   - [ ] 46 – 50 yrs
   - [ ] 50 yrs and above

2. What is your sex?
   - [ ] Male
   - [ ] Female

3. Indicate your academic and professional qualification.
   - [ ] P. 2
   - [ ] P. 1
   - [ ] Diploma
   - [ ] B. ED
   - [ ] PGDE
   - Any other specify……………………………………………………………………..
4. How long have you been in the teaching career?

   Less than one year

   [ ] 1 – 5 yrs       [ ] 6 – 10 yrs
   [ ] 15 yrs         [ ] 16 – 20 yrs
   [ ] 21 – 25 yrs    [ ] 26 and above yrs

5. Which classes do you teach?

   [ ] Lower primary       [ ] Middle classes
   [ ] Upper classes

6. What is the size of your school?

   [ ] Single stream       [ ] Double stream
   [ ] Triple stream       [ ] Four streams and above

7. Indicate the category of your school

   [ ] Day                  [ ] Boarding
   [ ] Day and boarding    [ ] Doesn’t have a special unit

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Part Two: Attitudes of Teachers towards Learners who are Intellectually Challenged

8. Have you ever been into contact with intellectually challenged learner in your class?

   [ ] Yes                  [ ] No

9. How did you know that the child is intellectually challenged?

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

10. Did you accept her or him at first?
11. Would you be willing to accept learners who are intellectually challenged in your class?
  [ ] Yes  [ ] No  [ ] Am not sure

Justify your answer

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

12. Which education system do you think would benefit children who are intellectually challenged?
  [ ] Special school  [ ] Inclusion

Justify your answer

…………………………………………………………………………………………
…………………………………………………………………………………………

What do you think will be the response of majority of teachers towards inclusion of learners who are intellectually challenged in regular schools?
  [ ] Very positive  [ ] Not sure
  [ ] Negative  [ ] Very negative

Effect of Teacher’s Attitude towards Learners who are Intellectually Challenged

13. As teacher would you accept a mentally disabled child in your class?
  [ ] Yes  [ ] No  [ ] Not sure
14. Where would you place the child?
   [ ] In front [ ] At the middle
   [ ] At the back [ ] Very close to me

15. What do you think will happen to the disabled child if he/she is not handled in the right way?
   [ ] Die [ ] Deteriorate
   [ ] Be independent [ ] Run away from school

16. Mentally disabled children can be educated like any other child so long as the teachers have positive attitudes towards them
   [ ] Strongly agree [ ] Agree
   [ ] Not sure [ ] Disagree
   [ ] Strongly disagree

17. How do you think a mentally disabled child should be handled? Explain

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

**Teaching/ Learning Resources**

18. In the table below, please rate the adequacy of the teaching/learning resources available in your school by placing a tick (✓) in the appropriate space.

<table>
<thead>
<tr>
<th>Teaching/Leaning Materials/Facilities</th>
<th>Adequate</th>
<th>Inadequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash cards/posters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age-appropriate concrete teaching aids</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classrooms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toilet facilities</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Learner Factors

19. In the table below, please state your agreement levels with the statements on social interaction between mentally retarded students with normal ones. Use the key below to respond:

**SA**= Strongly Agree, **A**= Agree, **D** = Disagree, **SD** = Strongly Disagree

**STEM: Allowing mentally retarded children to interact with normal children will:**

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase the child’s circle of friends.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limit the child’s level of academic performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Make the child less well adjusted socially</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ensure that ‘normal’ children will be happy to play with the children with disabilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worsen the child’s learning problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have a negative effect on the social development of other children</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide more opportunities for the other children benefit from the specialized instruction of the children with disabilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop a stronger feeling in the child of confidence in his/her academic ability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase the amount of social rejection by the child’s peers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ensure that ‘normal’ children will be more appreciative of children living with disabilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Knowledge on Mental Disability

20. Have you ever heard of a term “mental disability”?

[ ] No [ ] Yes
If yes what does it mean?

[ ] Mental break down [ ] Inability to think
[ ] Damage of the brain [ ] Am not sure
[ ] Not applicable

21. Do you believe in educating mentally disabled children?

[ ] Yes [ ] No

If yes how should they be educated?

[ ] Should be put in special school
[ ] Should be taught at home
[ ] Should be taught with the other children
[ ] Should be segregated

If no, what do you think should be done to them?

[ ] Be left to stay with their families
[ ] Should be thrown away or killed
[ ] Should be hidden under the shelters
[ ] Should be put in children’s home

22. According to your community, what causes mental disabilities?

[ ] Curse from God [ ] Witch craft
[ ] Inheritance [ ] Poverty
[ ] Diseases and other factors

Others (specify) ........................................................................................................

23. Do you agree with your community?

[ ] Yes [ ] No
If no what do you think causes mental retardation? Give only one response

24. Intellectually challenged children can learn in the same classes with others who are not intellectually challenged.

[ ] Strongly agree  [ ] Agree
[ ] Not sure  [ ] Disagree
[ ] Strongly disagree

Give reason to support your response

25. Can mental disability be prevented?

[ ] No  [ ] Yes

If yes how? Specify

26. Do you think the intellectually challenged child can live an independent life like any other child?

[ ] Yes  [ ] No

27. Suggest one way in which a mentally disabled child can be helped

Suggestions for Improving the Education of Children who are Intellectually Challenged
28. What do you think can be done to fit a mentally disabled child in the regular classroom? Give three suggestions

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

29. In your opinion, is there any importance of training teachers to handle children who are intellectually challenged?

[ ] Yes  [ ] No  [ ] Can be handled by anyone

30. Suggest about two things that are needed in schools to help children who are intellectually challenged in their learning

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

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

31. As a teacher, do you allow any children who are intellectually challenged in your class to interact with those who are not intellectually challenged?

[ ] Yes  [ ] No

If yes have you seen any improvement?

How?

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

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

THANK YOU FOR PARTICIPATING
APPENDIX 2

INTERVIEW SCHEDULE FOR PARENTS

Gender of parent………………………………………………

Academic qualifications……………………………………

Age of parent………………………………………………

INTERVIEW QUESTIONS

1. How many children do you have?

2. How many of your children are in school?

3. What is the age of the intellectually challenged child?

4. What is your relationship with the child?

5. How do you feel about the child who is intellectually challenged?

6. Is the intellectually challenged child attending school? If yes, is it a special or regular school?

7. What made you chose the type of school your child is attending?

8. Would you prefer a regular or special school for your child who is intellectually challenged? Explain

9. Do you think teachers in a regular school are capable of handling children who are intellectually challenged? Explain

10. Do you think children who are intellectually challenged would benefit more in regular or special schools? Explain
APPENDIX 3

INTERVIEW SCHEDULE FOR COUNTY DIRECTOR OF EDUCATION

1. Do you have children who are intellectually challenged in your district?

2. Do you have special schools for children who are intellectually challenged in your district? If no, why not?

3. Are there regular schools that accept children who are intellectually challenged in your district?

4. Do you get cases of parents mistreating their children who are intellectually challenged in your district?

5. If yes, how do you deal with such cases?

6. Do you get cases of mistreatment of children who are intellectually challenged in schools by teachers or other pupils? If yes, how do you deal with such cases?

7. Are there schools that offer specialized training for teachers who handle children who are intellectually challenged in your district?

8. In your opinion, is it important to include children who are intellectually challenged in normal classrooms? If yes, does this help the children who are intellectually challenged to learn better and faster?

9. What strategies have you come up with in the district to improve the teaching and learning of learners who are intellectually challenged?
APPENDIX 4

RESEARCH PERMIT