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**FACTORS AFFECTING ASSESSMENT AND  
PLACEMENT OF CHILDREN WITH MENTAL  
RETARDATION BY THE NYERI CENTRAL  
ASSESSMENT CENTER, KENYA**

**BY**

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**THIS THESIS SUBMITTED IN PARTIAL FULFILMENT FOR  
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**DECLARATION**

“This Thesis is my original work and has not been presented for a degree in any other university”

Signature 

Date 07/05/10

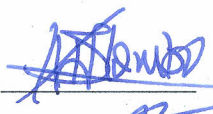
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## **DEDICATION**

This study is dedicated to my family for their support and understanding during this undertaking.

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## ABBREVIATIONS AND ACRONYMS

AAMD	American Association on Mental Deficiencies.
AAMR	American Association on Mental Retardation.
CNS	Central Nervous System
DA	Dynamic Assessment.
DANIDA	Danish International Development Agency.
DSM	Diagnostic and Statistical Manual of Mental Disorders.
EAHC	Education for All Handicapped Children.
EARC	Educational Assessment and Resource Center.
EARS	Educational Assessment and Resource Services.
FAPE	Free and Appropriate Public Education.
IDEA	Individuals with Disabilities Education Act.
IEP	Individualized Education Program.
IQ	Intelligence Quotient.
KABC	Kaufman Assesemnt Battery for Children.
KIE	Kenya Institute of Education.
KISE	Kenya Institute of Special Education.
LEA	Local Education Authority.
LRE	Least Restrictive Environment
MLD	Moderate Learning Difficulties.
MOE	Ministry of Education.
MOEST	Ministry of Education Science and Technology.
MR	Mental Retardation.

PIAT-R	Peabody Individual Achievement Test-Revised.
PKU	Phenylketonuria.
SLD	Specific Learning Difficulties.
SNE	Special Needs in Education.
TIQET	Totally Integrated Quality Education and Training.
UK	United Kingdom.
USA	United States of America.
WISC-R	Wechsler Intelligence Scale for Children-Revised.
WRAT-R	Wide Range Achievement Test-Revised.

## ABSTRACT

A Task Force on Special Needs Education was commissioned by the Ministry of Education Science and Technology in 2003 to appraise the provision of Special Needs Education in Kenya. The Task Force reported in August 2003 that 90% of the Educational Assessment and Resource Centers (EARC's) in Kenya were making inappropriate placement decisions due to lack of the necessary facilities and appropriately trained personnel. Available literature on assessment suggests that the assessment process sometimes results in wrong diagnosis and therefore wrong placement of children suspected of having mental retardation. This study sought to find out how the assessment and placement process is carried out in Nyeri Central EARC focusing on the factors that influence successful assessment and placement namely; the personnel involved in assessment, the assessment tools and materials used, and the assessment process. The possible reasons that could make the EARC make wrong placement decisions and how to avoid them were also addressed. Review of the related literature focused on some of the key areas in special needs education related to assessment and placement of children with mental retardation. Definitions, causes, and classification of mental retardation are covered in this study. A brief on the historical development of assessment services in Kenya is also provided. A descriptive design was employed in this study and purposive sampling done as the study touched only on the persons directly involved with assessment and placement of children suspected of having mental retardation. Data was collected using interviews, observation and document analysis with participants being the head teachers of two special schools for children with mental retardation in Tetu District, the assessment teacher at the EARC, and parents who took their children for assessment. Admission documents of individual children already enrolled in the special schools were perused to gather information regarding their placement. Data was analyzed according to the themes emerging from the study which were related to the personnel, assessment tools and the process of assessment, as well as the presence of wrongly placed children and what could be done to rectify the situation. The findings of this study pointed out that there were shortcomings in the whole assessment and placement process at the EARC as a team approach to assessment and placement was limited to the assessment teacher, the child and the parent. The EARC lacked some basic assessment tools and materials, and the tools and materials found in use there were found wanting. The study suggests a number of measures that can be taken to make the assessment and placement process at the Nyeri Central EARC more effective. These measures include making use of a multidisciplinary team approach to assessment and placement, acquisition of enough and appropriate assessment tools and materials effectively address both intellectual and adaptive behavior problems that define mental retardation. The study also suggests the re-evaluation of all children suspected of having been wrongly placed in the special schools.

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background to the Problem

Before placement in a special school or a special unit for children with mental retardation, a thorough referral and assessment process must be undertaken by a team of professionals or a multidisciplinary team. The child suspected of having mental retardation, the child's parents or guardians, and the child's class teachers must be actively involved in the process. Bala (2004) mentions some of the professionals in the multidisciplinary team as; ophthalmologists, audiologists, psychologists, pediatricians, neurologists, psychiatrists, and educational personnel.

The report of the Task Force on Special Needs Education of 2003 commissioned by the Ministry of Education, Science and Technology (Kochung Report, 2003) found out that less than 10% of the 72 Educational Assessment and Resource Centers (EARCs) that existed in Kenya at the time were served by multidisciplinary teams. The Task Force on Special Needs Education also found out that the personnel manning the majority of EARCs in Kenya were not trained in assessment. Most assessment teachers had just basic training in Special Needs Education (SNE), and some of the centers were manned by teachers who were not trained in either assessment or in SNE, which made the Task Force conclude that most of the assessment teachers were

not competent enough to carry out assessment of learners with SNE. This is further supported by the National Special Needs Education Policy Framework (2009) which says that assessment teachers posted to the EARCs are either not well trained in assessment or lack necessary facilities and work with the knowledge they acquired when they trained as SNE teachers.

Both the Education for All Handicapped Children Act or PL 94-142, of 1975, in the United States of America (USA) and the 1981 Education Act of United Kingdom (UK), state that the assessment process starts with the class teacher because of a child's unsatisfactory performance in school (Solity, 1992). A regular class teacher's evaluation though helpful, may not give a completely satisfying opinion because a child's poor performance could come about as a result of poor instructional practices in the class, and unsuitable curriculum content rather than a problem from within the child (Perry, 1974).

According to Cline (1992), a class teacher's decision to refer a child for assessment may also be influenced by the teacher's inability to recognize the differences between a child who has mental retardation (MR), a child who has specific learning difficulties (SLD) or a child who has communication disorders. Such cases when referred for assessment may well be placed in special schools for children with mental retardation, where they do not fit.

The Education Act of 1981 in the UK (Solity, 1992) stipulates that a parent or a guardian of the child suspected of having mental retardation must give consent for a child to be referred for assessment. The permission must be given in

writing. The child's parent or guardian must be involved in the assessment process. The Task Force on Special Needs Education in Kenya (2003) found out that the assessment centers in Kenya did not involve parents or the local community in their identification, assessment and intervention procedures.

In the assessment process, standardized assessment tools should be used, but according to the Task Force on SNE (2003), some assessment centers in Kenya had no such tools for screening children with different impairments. Where any tools were available, the Task Force concluded that they were inadequate and needed revision, updating and validation. Earlier in 1999, after having found out that the assessment tools in use at the EARCs were inappropriate, the report on Totally Integrated Quality Education and Training (TIQET) had recommended that Kenya Institute of Education (KIE) embarks on developing the necessary standardized tools (Koech Report, 1999).

Timely and effectively done, assessment of children with disabilities including those with mental retardation results in appropriate placement where these children can benefit (Bala, 2004). In some cases, assessment results in wrong diagnosis and therefore wrong placement. Reginald (1988) as quoted by Cline (1992) says that there was a crisis in psycho-educational assessment of children from minority groups in the USA going by their large numbers in special education classes of pupils with mental retardation (MR) and moderate learning difficulties (MLD). This state of affairs was blamed on the psychological assessment process as well as the person administering the tests. Intelligence quotient (IQ) tests were accused of being culturally and

linguistically biased. Psychologists were accused of administering inappropriate tests and not having made progress in developing culturally appropriate tests. The ordinary classroom teacher who frequently originates the referral process and whose comments carry a lot of weight in the special education placement decisions was also blamed for making wrong referral decisions (Cline, 1992). Oswald et al (2001) in Garguilo (2006) reported a drastic 37% drop in the enrolment of children with mental retardation since the enactment of PL 94-142 in 1975 in the USA. One of the reasons given to explain this drop was the growing reluctance by professionals to identify children as having mild mental retardation especially if they come from minority groups.

Pierangelo (1998) lists the components of an effectively carried out assessment which would result in appropriate placement of a child. To start with, an individual psychological evaluation should be done when a multidisciplinary team determines that it is necessary. This evaluation includes; general intelligence, instructional needs, learning strengths and weaknesses, and social and emotional dynamics. A thorough academic history including interviews or reports from the child's past and present teachers is reported together with a thorough social history. A physical examination of the child is made too.

## **1.2 Statement of the Problem**

The Task Force on Special Needs Education (Kochung Report, 2003) noted that 20 out of the 72 EARCs that existed in Kenya had neither physical facilities nor assessment tools to conduct appropriate assessment. The report further said that lack of relevant training by the personnel manning these centers often led to mislabeling and wrong placement (Kochung Report, 2003: 64). Availability of physical facilities, appropriate assessment tools, materials and qualified assessment personnel are the requirements that determine the success of an EARC in conducting effective assessment and making appropriate placement decisions. A multidisciplinary team approach to assessment and placement should also be practiced to make the EARCs effective in their work. The report of the Task Force (2003) did not mention the specific EARCs which did not conduct proper assessment and made wrong placement decisions. But since wrong placement decisions emanated from the EARCs, this study looked into the EARC at Nyeri Central district with a view of finding out the factors that could affect appropriate assessment and placement for children with mental retardation by the assessment center.

## **1.3 Purpose of the Study**

The purpose of this study was to find out the factors that affected assessment and placement of children suspected of having mental retardation at the Nyeri Central EARC. The focus of the study was therefore to establish the professional qualifications of the assessment personnel at the EARC, the

assessment tools and materials that were in use at the EARC, and to observe the assessment process with a view of finding out who was involved in assessing a child suspected of having mental retardation. The study looked at the reasons that could lead to wrong placement at the EARC and suggested some measures that could address the issue.

#### **1.4 Objectives of the Study**

The objectives of the study were:

1. To establish the professional qualifications of the personnel involved in the assessment and placement process at Nyeri Central EARC.
2. To establish the tools and materials used in assessment at Nyeri Central EARC.
3. To observe the process of assessment at Nyeri Central EARC.
4. To identify the factors that could lead to wrong assessment and placement of children suspected of having mental retardation at Nyeri Central EARC.

#### **1.5 Research Questions**

The researcher raised the following questions in the study:

1. What were the professional qualifications of the personnel involved in the assessment and placement process at Nyeri Central EARC?
2. What tools and materials were used in assessment at Nyeri Central EARC?
3. How was assessment and placement carried out at Nyeri Central EARC?

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4. What factors could contribute to wrong assessment and placement of children suspected of having mental retardation at Nyeri Central EARC?

### **1.6 Significance of the Study**

This study was aimed at encouraging the personnel involved in assessment to make appropriate assessment and placement decisions by using appropriate assessment tools, materials and procedures. Education administrators will be challenged to put in place the necessary requirements to facilitate effective assessment in terms of assessment tools and materials as well as assessment personnel. Assessment personnel will be encouraged to vigorously seek all the necessary information about a child from parents, teachers and other relevant sources before they embark on assessment. Assessment personnel will also realize the importance of reporting the assessment results and their recommendations to their clients and service providers in writing to facilitate unproblematic follow up later. Teachers and parents will find the results of this study useful in making appropriate referral decisions.

### **1.7 Delimitations and Limitations of the Study**

The researcher used of two sets of study samples for this study. One part of the sample was made up of the persons involved in assessment and placement which included the assessment personnel at the EARC, head teachers and parents of children suspected of having mental retardation. The other part of the study sample was made up of the relevant documents used in placement of

children to special schools after assessment has been done. At the EARC, the researcher only interviewed the assessment teacher charged with the assessment of children suspected of having mental retardation and in the two special schools only the head teachers were interviewed since they were directly involved in admission of children to their respective schools. During the two weeks that were spent observing assessment sessions, the researcher was able to interview only five parents who brought their children for assessment.

The study realized that regular schools referring children for assessment did not provide written reports to the EARC about the children. Likewise, the EARC did not write reports to accompany referrals for placement to the special schools, and perusal of admission documents at the special schools did not shed much light about the assessment results to justify the placement. Therefore the researcher had to rely entirely on the interviews with the assessment teacher, the two head teachers and the parents to find out the reasons for referrals. Observation of the assessment sessions did not result in any referral for admission to a special school so the researcher relied on the admission documents of earlier placements already filed in the schools to try and gather the reasons cited for placing individual children to the special schools.

### **1.8 Assumptions**

The study was based on the following assumptions:

1. The assessment personnel at the EARC possessed the necessary professional qualifications to carry out assessment and placement.
2. The EARC was adequately equipped to carry out assessment.
3. Standardized tools, materials and procedures were used in assessment.
4. Assessment and placement involved a multidisciplinary team approach.
5. Some cases of wrong placement existed in the two special schools.

## **1.9 Theoretical Framework and Conceptual Framework**

### **1.9.1 Theoretical Framework**

The theory guiding this study was the cultural/historical theory by Lev S. Vygotsky, which says that the human being is the subject of culture, and that learning has connecting links between social/cultural processes taking place in society, and mental processes taking place in the individual. Therefore learning is a shared or a joint process in a responsive social context (Gindis, 1999).

Vygotsky noted that traditional IQ testing equalized natural and cultural processes thereby making it unable to differentiate impaired functioning that can be due to cultural deprivation from the impaired functioning resulting from organic damage. He therefore suggested that the most appropriate tests should be a developmental assessment concentrating on mental processing and certain qualitative meta-cognitive indications such as cognitive strategies employed by the child, type and character of mistakes, ability to benefit from help provided by the examiner, and emotional reactions to success and failure. Vygotsky laid the background for testing procedures commonly recognized as Dynamic

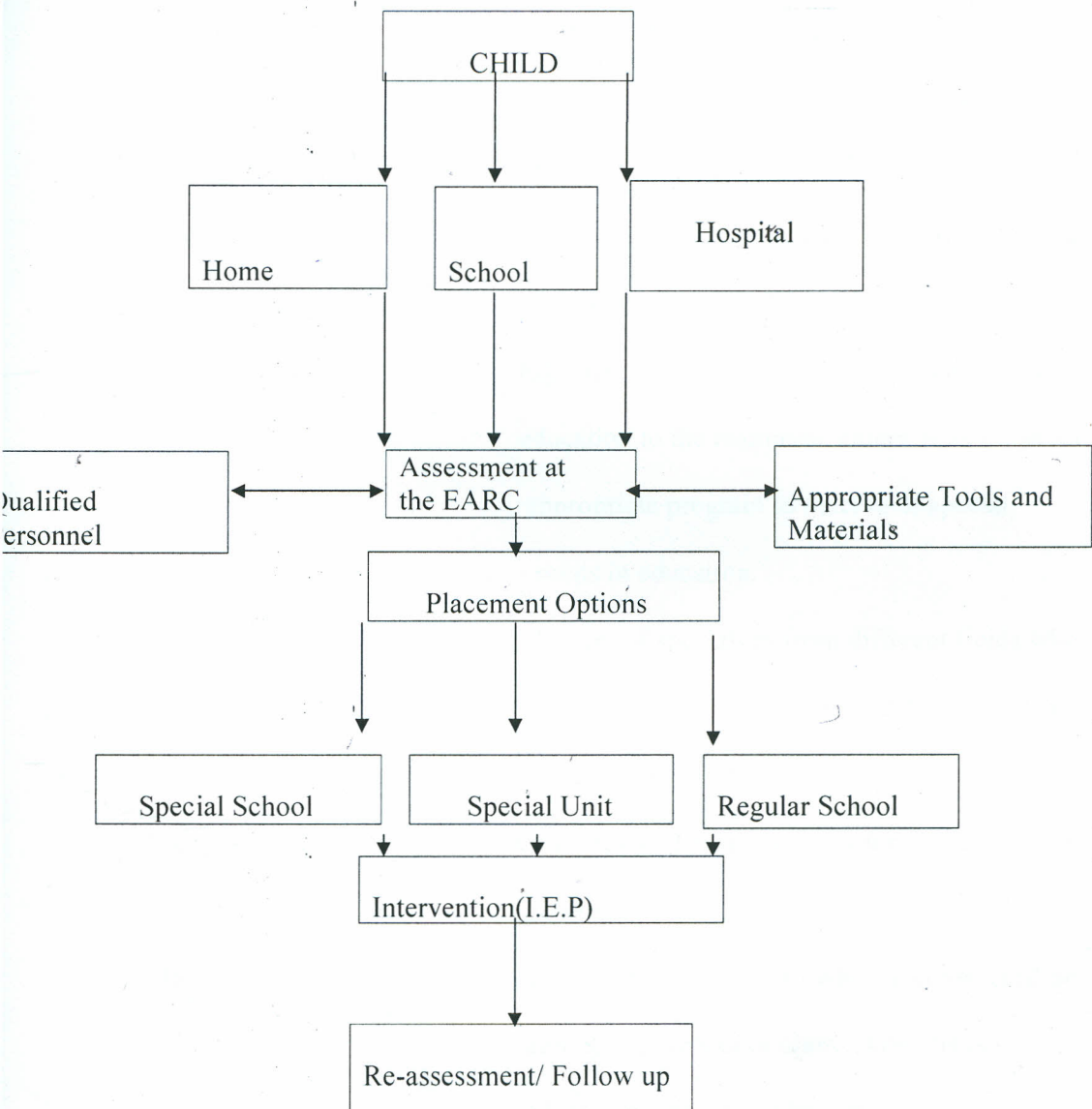
Assessment (DA), which is an interactive procedure that follows test-intervene-retest format focusing on cognitive processes and meta-cognitive characteristics of a child's pretest and posttest performance. By using DA, the evaluator can derive important information about a child's cognitive modifiability, responsiveness to an adult's help, and amenability to instruction and guidance.

Vygotsky's theory as applied to this study emphasizes that the focus of assessment should not only consider a child's cognitive functioning but also look critically at adaptive skills which are developmental social/cultural issues. Different tests for different aspects of cognitive and adaptive skills are required for effective assessment to be made. Such tests should lead the child to a point of achieving success in a shared/joint activity rather than trail that child's cognitive development to a point of failure as traditional standardized assessment does.

A child needs to undergo a series of tests with intervening mediation before his or her amenability to remediation is decided. In dynamic assessment, the assessor actively intervenes during the course of the assessment of the learner with the goal of intentionally inducing changes in the learner's current level of independent functioning. The assessment focuses on the child's processes of problem solving, including those that promote as well as obstruct successful learning. The most unique information from the assessment is the information about the learner's responsiveness to intervention (Lidz, 2007).

### 1.9.2. Conceptual Framework

Assessment starts with the regular class teacher and/or a parent/guardian who notices a problem with a child's performance in school. A child may also be referred for assessment by the medical personnel. The child is then assessed and the appropriate intervention measures instituted. After intervention, the child is evaluated again and the interventions in place are retained, modified or changed depending on the child's progress.



### **1.10 Operational Definition of Terms**

Assessment:	Testing done to establish the presence of mental retardation.
Assessment Tools:	Tests used to evaluate performance.
Diagnosis:	Identifying the type of disability that is present in an individual.
Effectiveness of Assessment:	Use of appropriate personnel, tools and procedures to avoid wrong placement.
Labeling:	Describing one as having mental retardation after conducting assessment.
Least Restrictive Environment:	An Educational placement where children with special needs in education are educated together with those without special needs in education to the maximum extent possible in an appropriate program to meet their special needs in education.
Multidisciplinary Team:	A team of specialists from different fields who evaluate children suspected of having special special needs in education.
Phenylalanine:	An amino acid that is crucial for normal human growth.
Placement:	Admission of a child to what is considered an appropriate school or class where his/her educational needs can be met.

- Prognosis: These are the Outcomes of a handicap which give rise to a label and determine the course of intervention strategies.
- Referral: Directing a child to go for assessment after deficits are noted in his/her performance. It is usually done by class teachers and or with parents.
- Screening: The initial testing for referral purposes done without the use of standardized assessment tools to establish the need for further assessment.
- Stigma: A label of disapproval placed on an individual as a result of the individual's condition.
- Trisomy: A Chromosomal abnormality.

## CHAPTER TWO

### LITERATURE REVIEW

#### **2.1 Definition and Scope of Special Needs Education**

Special Needs Education teacher training module (KISE, 2000) defines Special Needs Education as the education which provides appropriate modifications in the; curricula, teaching, methods, teaching and learning resources, medium of communication or to the environment in order to meet individual special educational needs. Learners with special needs or special educational needs are learners with; learning difficulties, communication challenges, emotional and behavioral disorders, physical disabilities, and developmental disorders. These learners are likely to benefit from additional educational services, different approaches to teaching, access to a resource room and use of technology (Goodman, 1990).

Special needs education includes a range of supportive services depending on the special needs of learners. Supportive services may include physical assistance and therapy, counseling and modified learning environments, as well as assistive learning devices. Other supportive services include educational and psychological assessments, and behavioral modification techniques (AAMD, 1992).

In 1975, the Education for All Handicapped Children Act (EAHC) in the States of America (USA) mandated that all states provide Free and Appropriate Public Education (FAPE) to all children, including those with physical, mental

or behavioral disabilities. In 1977, the individuals with Disabilities Education Act (IDEA) in the USA stipulated that all children with disabilities, regardless of the type of disability or severity of their disability who were between the ages of three and 21 years were entitled to FAPE in the Least Restrictive Environment (LRE). That is, children with special needs must be educated together with non-disabled children to the maximum extent possible in an appropriate program to meet their special needs (AAMD, 1992).

According to IDEA (Byrnes, 2002), a child who is not making effective progress in school because of a disability and who requires specially designed instruction or related services in order to make progress in school qualifies for special needs education. Related services are the non-educational services that permit a child with disability to participate in SNE. These services include; transportation, various therapies, mobility instruction, social work, and medical services for diagnostic and evaluation purposes.

Special needs education must include comprehensive screening and diagnosis by a multidisciplinary team and development of an annual Individualized Education Program (IEP) for each student. The IEP outlines the academic and behavioral goals, services to be provided and methods of evaluation for an individual learner. In the USA, the parents of the students must consent to the initial screening and must be invited to participate in all phases of the assessment and intervention processes according to the requirements of PL 94-142 of 1975 (Cline, 1992).

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## **2.2 Mental Retardation**

In 2002, the American Association on Mental Retardation (AAMR) defined mental retardation as a disability characterized by significant limitations both in intellectual functioning, social and adaptive behavior as expressed in conceptual, social and practical adaptive skills. This disability originates before the age of 18 years (Garguilo, 2006). According to AAMR it is assumed that limitations in present functioning must be considered within the context of community environments typical of the individual's age peers and culture. It should be noted that valid assessment considers cultural and linguistic diversity as well as differences in communication, sensory, motor, and behavioral factors (Pierangelo, 1998).

Within an individual, limitations often exist together with strengths, and an important purpose of describing limitations is to develop a profile of needed supports. With appropriate personalized support over a sustained period, the life functioning of the person with mental retardation will generally improve. An accurate understanding of mental retardation involves the knowledge that mental retardation refers to a particular state of functioning that begins in childhood, that has many dimensions and is affected positively by individualized supports (AAMD, 1992).

In the definition of mental retardation, three key words stand out. These are; disability, intelligence and adaptive behavior. It is important to elaborate on

each of these terms so that the field of mental retardation is clearly demarcated before we are able to determine who has and who does not have mental retardation. According to AAMD (1992), a disability is a substantial disadvantage suffered by an individual when attempting to function in a society. It is caused by an impairment of a part of the body, and it should be considered within the context of the environment, personal factors and the need for individualized supports.

Intelligence refers to the general mental capacity. It involves the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly and learn from experience (Lenfrancois, 1985). Intelligence is represented by intelligence quotient (IQ) scores obtained from standardized tests given by a trained professional. According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), mental retardation is generally thought to be present if an individual has an IQ tests score of about 70 or lower which represents about two standard deviations from the average of 100, when the standard deviation is ten (Sattler, 1992).

Adaptive behavior is the collection of conceptual, social and practical skills that people have learnt so that they are able to function in their everyday lives. Significant limitations in adaptive behavior impact negatively in a person's daily life and affect the ability to respond to a particular situation or to the environment (AAMD, 1992).

Limitations in adaptive behavior by children with mental retardation can be determined using tests that are standardized on the general population including people with disabilities and people without disabilities. On these standardized measures, significant limitations in adaptive behavior are operationally defined as performance that is at least two standard deviations below the mean of conceptual, social or practical skills. Adaptive skills include; communication, home-living skills, use of community resources such as health and leisure, self-direction, functional academic skills of reading, writing and arithmetic, and work skills (AAMD, 1992).

### **2.3.0 Causes and Symptoms of Mental Retardation**

According to the Gale Encyclopedia of Medicine (2006), low IQs existing concurrently with limitations in two or more adaptive skill areas are the hallmarks of mental retardation. Aggression, self injury, and mood disorders are sometimes associated with the disability. The severity of the symptoms and the age at which they first appear depend on the cause. Children with mental retardation reach developmental milestones significantly later than expected, if at all. Retardation that is caused by a chromosomal or other genetic disorder, it is often apparent from infancy. When retardation it is caused by childhood illnesses or injuries, learning and adaptive skills that were once easy may suddenly become difficult or impossible to master. In about 35% of cases, the cause of mental retardation cannot be found. Biological and environmental factors that can cause mental retardation include the following; genetics,

prenatal illnesses, childhood illnesses, and environmental factors (Gale Encyclopedia of Medicine, 2006).

### **2.3.1 Genetics**

About 5% of mental retardation is caused by hereditary factors. Mental retardation may be caused by an inherited abnormality of the genes, such as fragile X syndrome. According to Mazzocco (2000) as quoted in Gargiulo (2006), Fragile X is a defect in the chromosome that determines sex and generally affects males and females can be carriers. It is the most commonly inherited cause of mental retardation. This deficiency in the X-chromosome of the 23<sup>rd</sup> pair results in cognitive difficulties and language problems among other problems.

Single gene defects, such as phenylketonuria (PKU) is a condition in which phenylalanine accumulates in the liver cells, then overflows into the blood and impairs development of the brain, causing severe mental retardation if not found and treated early (Wilson, 1994: 280). An accident or mutation in genetic development may also cause mental retardation. An example of such accidents is the development of an extra chromosome 21(trisomy) or Down syndrome, which is caused by an abnormality in the development of chromosome 21. This is the most common genetic cause of mental retardation (Zigler and Hodapp, 1986).

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### **2.3.2 Prenatal Illnesses and Related Problems**

Fetal Alcohol Syndrome is caused by excessive alcohol intake by the mother in the first trimester of pregnancy. Some studies have shown that even moderate alcohol use during pregnancy may cause learning disabilities in children. Drug abuse and cigarette smoking during pregnancy have also been linked to mental retardation (Gale Encyclopedia of Medicine, 2006).

Maternal infections and illnesses such as rubella may cause mental retardation. When a mother has high blood pressure (hypertension) or blood poisoning (toxemia), the flow of oxygen to the fetus may be reduced, causing brain damage and mental retardation (AAMD, 1992).

Birth defects that cause physical deformities to the head, brain, and central nervous system (CNS) frequently cause mental retardation. For example, Neural tube defect is a birth defect in which the neural tube that forms the spinal cord does not close completely. This defect may cause children to develop an accumulation of cerebrospinal fluid on the brain known as hydrocephalus. According to the Gale Encyclopedia of Medicine, (2006) Hydrocephalus which is manifested by appearance of an unusually large head can cause learning impairment by putting pressure on the brain.

### **2.3.3 Childhood Illnesses and Injuries**

Hyperthyroidism, whooping cough, chicken pox, measles, and a bacterial infection known as Hib disease may cause mental retardation if they are not

treated adequately. An infection of the membrane covering the brain or meningitis and an inflammation of the brain known as encephalitis cause swelling that may in turn cause brain damage and mental retardation. Traumatic brain injury caused by a blow to the head or a violent shake may also cause brain damage and mental retardation in children (Gale Encyclopedia of Medicine, 2006).

#### **2.3.4 Environmental Factors**

Ignored or neglected infants who are not provided with mental and physical stimulation required for normal development may suffer irreversible learning impairments. Children who live in poverty and suffer from malnutrition, unhealthy living conditions, and improper or inadequate medical care are at a higher risk. Exposure to lead can also cause mental retardation. Many children have developed lead poisoning by eating the flaking lead-based paint often found in older buildings (AAMD, 1992).

#### **2.4.0 Classification of Mental Retardation**

The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) which is the diagnostic standard for mental healthcare professionals in the USA classifies four different degrees of mental retardation. The four categories of MR, which are based on the functioning level of an individual and are as follows; mild MR, moderate MR, severe MR, and profound MR (Gale Encyclopedia of Medicine, 2006).

### **2.4.1 Mild Mental Retardation**

According to the Gale Encyclopedia of Medicine (2006) mild mental retardation constitutes 85% of all the cases of mental retardation. Their IQ scores range from 50-75 and can acquire academic skills up to the sixth grade. They can become fairly self-sufficient and in some cases live independently when they are given community and social support. Educational placement preferable for this category of mental retardation is in regular school.

### **2.4.2 Moderate Mental Retardation**

About 10% of those with mental retardation are in this category. Their IQ scores range from 35-55 and can work and take care of themselves with moderate supervision. According to AAMD (1992), they acquire communication skills in childhood and are able to live and function successfully within the community in a supervised environment such as a group home. Their ideal educational placement is in a special school.

### **2.4.3 Severe Mental Retardation**

These are about three to four per cent of those with mental retardation. Their IQ scores range from 20-40 and they can master very basic self-care skills and some communication skills. Many are able to live in a group home. This group of learners can also be placed in a special school (AAMD, 1992).

#### **2.4.4 Profound Mental Retardation**

With IQ scores of 20-25, this category comprises 1-2 % of persons with mental retardation. With appropriate support and training, many are able to develop basic self-care and communication skills. Their retardation is usually caused by an accompanying neurological disorder and they need high level of structure and supervision. Those children who fall under this category cannot fit in school as they are totally dependent (Gale Encyclopedia of Medicine, 2006)

#### **2.5.0 Assessment of Children Suspected of having Mental Retardation**

Mehan et al (2004) as quoted in Gargiulo (2006), define assessment as a generic term that refers to the process of gathering information for the purpose making decisions. Assessment requires a multidisciplinary team of professionals of which one member must be a teacher (Bala, 2004). The team is responsible for developing an individualized and comprehensive assessment package that evaluates broad developmental domains, that is; cognitive and academic, as well as specific areas of concern noted on the referral such as social and emotional problems. Successful assessment dictates the use of both formal and informal assessment tools (Gargiulo, 2006).

IDEA specifies that no one procedure may be used as the sole basis for evaluation. A multitude of tests is required. IDEA says that assessment must be done in a language that a child understands. According to Holtgrewe (1964) as quoted in Perry (1974), a school nurse acts as the link between the school and

the child's home and arranges for all the examinations by the specialists involved in assessment of a child. When properly conducted, educational assessment leads to the development of meaningful IEPs. Goals and objectives are crafted based on the data obtained from the evaluations. If the multidisciplinary team members working together with parents/guardians determine that a child does not qualify for SNE services, they develop intervening strategies and recommendations to address the concerns that had led to the referral (Bala, 2004).

### **2.5.1 Referral**

According to the requirements of the 1981 Education Act in the United Kingdom (UK), the statutory assessment procedure can be initiated by anyone who has reasonable grounds for supposing that a child has special needs. The two persons that are most likely to refer a child are the regular class teacher and the parent. If the initiative does not emanate from the parent, the parent's permission must be sought to carry out the assessment process. The person who suspects a problem in a child notifies the Director of Education who then contacts the relevant personnel to request a written report on whether the child in question has special educational needs. Parents are formally notified and told that they can make their views known to representatives of the Local Education Authority (LEA) (Tomlison, 1982).

According to Bala (2004), referral precedes a child being labeled as disabled in one way or another. A regular classroom teacher can use observation, criterion

referenced assessment, and curriculum based assessment for referral purposes. A teacher can observe systematically and collect baseline data, then develop a Criterion Referenced Test to know how well or poorly a child is compared to others.

Many factors influence the decision to refer because Special Educational Needs are not purely within the child (Lewis, 1995). Cline (1992) states that a teacher's decision to refer may be greatly influenced by; lack of provision of certain services such as mother tongue instruction, pressure from the school head, amount of involvement of advocacy groups and parents as well as poor quality of instruction. It should be noted that the decision to refer may also be influenced by the teacher's attitude, beliefs about child development and behavior as well as the teacher's ability or inability to deal with differences from the norm, particularly with teachers who work with culturally and linguistically diverse pupils.

### **2.5.2 The Assessment Process**

Globally defined, child assessment is the systematic use of direct as well as indirect procedure to document the characteristics and resources of an individual child (Simeonsson and Bailley, 1992). The procedure and instruments used in assessment result in the confirmation of a diagnosis, documentation of the developmental status, and the prescription of intervention and or treatment (Simeonsson and Bailley, 1992). Assessment is conducted to establish whether a diagnosis of mental retardation or other developmental

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disabilities is warranted. Assessment is also meant to establish the eligibility for SNE services and for determining the educational or psychological services needed by the child and the family. The assessment process should include an evaluation of the child's cognitive and adaptive or everyday functioning including behavioral concerns where appropriate. An evaluation of the family, home and or the classroom to establish goals resources and priorities is also part of the assessment process.

Scholl (1986) says that regular, complete and non-discriminatory assessment minimizes erroneous diagnosis which in turn results in wrong placement and inappropriate programming. In order that a suitable program may be planned for a child, he or she may need to be assessed or studied by a team of specialists from different fields.

Norm-referenced tests, interview, observations and informal tests are four components of assessment which complement each other and form a firm foundation for making decisions about children Sattler (1992). The use of more than one assessment procedure provides a wealth of information about the child permitting the evaluation of biological, cognitive, social and interpersonal variables that affect the child's current behavior. It is important to obtain information from parents and other significant individuals in the child's environment. For school age children, teachers provide additional source of information.

It is quite difficult to assess infants and preschoolers because what might appear to be mental retardation could well be developmental delays which are hard to distinguish from mental retardation. Children under the age of two should be given a diagnosis of developmental delays, which leaves room for the cognitive or behavioral deficits to be transitory or of ambiguous origin (Sattler, 1992). So, unless the deficits exhibited by the infant are relatively severe and or the child has a condition that is highly correlated with MR such as Down syndrome he or she should not be diagnosed as having mental retardation.

The 1981 Education Act (UK), states that once parental permission is given for assessment to be carried out, the Director of Education asks the child's teachers, an education psychologist and the school medical officer for their professional opinions about the child's educational needs. Each professional then undertakes a period of assessment of the child's needs (Tomlison, 1982).

The Education for all Handicapped Children Act (PL 94-142) of 1975 in the USA spells out a series of steps to be followed in the identification process in the following manner; A teacher, parent or someone else refers a child for evaluation, who is then evaluated by a committee of teachers including the special education teacher to determine whether the child should be assessed by a multi-disciplinary team. Once an assessment is approved, parental permission is obtained, and evaluation is conducted by a multi-disciplinary team which includes; a psychologist, a social worker, the classroom teacher and the special education teacher. These team members hold a conference and

decide on eligibility of the child's placement in a special needs education program, and if the child is eligible, an IEP is formulated and the child is placed in the appropriate service (AAMD, 1992).

During the meeting of the specialists involved in evaluating the child, specialists must discuss their individual findings and be able to give an accurate account of their understanding of the child's needs. It is also important that the team also discusses reports on the child's growth and history, as well as family background. A report on behavior is also included (AAMD, 1992).

Perry (1974), says that a complete evaluation by an educator experienced in teaching, testing and studying retarded youngsters might be more helpful than one provided by anyone else. The person most likely to fit this description is the regular classroom teacher but his or her evaluation would fall short in giving a completely satisfying opinion because of problems associated with validation of the tools and procedures that he/she might use (Ysseldyke, 1987).

Educational assessment can be carried out using different techniques and procedures depending on the nature of the special needs of the learner. The techniques used include; use of observations, testing, questionnaires and checklists. According to Lewis (1995), assessment can be curriculum based using structured observation schedules, diagnostic assessment which looks for sub skills underlying a task, for example reading, standard tests and scales for

summative assessment which are externally derived, and lastly a baseline assessment which is a formative teacher assessment.

The initial requirements of the baseline assessment include; class records, standardized tests results, and parents views on factors contributing to child difficulties, parents views on actions that the school might take ,and child's perception of own difficulties and how they might be addressed and other relevant information such as medical reports. According to Biasini, Lisa, Lisa, and Norman (undated), an assessor should keep any spoken or written information about a learner in total secret, because disclosure may lead to loss of trust on the part of the person who provides such information, being sued by the parents and hurt feelings.

Ndurumo (1993) says that assessment starts with identification which involves pinpointing the child's problems by observation. This is followed by the screening stage where general assessment tools are used. For example, tools for developmental milestones and language development. The third step in assessment is diagnosis whereby after screening identifies a problem, a child is referred to a specific professional for a detailed evaluation which leads to a diagnosis. Assessment can be summed up as the overall process of evaluation to ascertain the nature and degree of a child's handicap or ability.

### **2.5.3 Labeling**

Labeling refers to the act of assigning a child or a condition to a general category in the classification system (Hobbs, 1975) as quoted in Bala (2004). There are both positive and negative sides to labeling. Hobbs (1975) states that on the positive side, labels lead to improved legislation, improved communication and development of advocacy agencies. On the negative side, there are possibilities of stigmatization, peer rejection and wrong labeling of minority groups children on the basis of inappropriate tests.

Labeling process is not easy as there are some overlapping characteristics in children suspected of having different types and degrees of disabilities. For example, children with mild mental retardation and those with learning disabilities may exhibit very similar characteristics to a casual observation. Hence to provide a specific education program based on a label alone is obviously an inappropriate step. The label, correct or otherwise may serve as a means of social control by eliminating undesirables from the mainstream. According to Gallagher (1976) as quoted in Reynolds (1983), labeling has been used as an exclusionary process disguised as a remedial process.

Pierangelo (1998) stresses that before labeling is done, a variety of valid assessment instruments must be used, and the evaluation done must ensure that any single test is administered by a person who is trained to do so. Sattler

(1992 also notes that a variety of assessment instruments are insensitive to cultural differences resulting in mislabeling and misdiagnosis.

#### **2.5.4 Essentials of Assessment.**

Bostock (2006) discusses the requirements of an effectively functioning assessment room or an assessment area. Some major inclusions in the assessment room include; a wheel chair, dressing up clothes, baby carriages, seats in front of the assessor, strings and beads, posting boxes, and basic home equipment for feeding and cleaning.

Children who cannot seat themselves on account of their conditions or body sizes can be sat on a wheel chair or baby carriage as assessment is carried out on them. Dressings up clothes are important for the assessor to give dressing tasks to a child so as to establish the child's competences in dressing himself or herself. For example, a child's ability to put on a shirt and button it up can be observed and rated if a shirt is available for the purpose. The use of strings and beads as well as posting boxes is important in establishing the child's competences in gross and fine motor skills. Likewise the availability of basic home utensils can help the assessor determine a child's proficiency in their use. Seating a client in front of the assessor is better than seating him or her on one side because it reduces unnecessary turning to the side to ask questions or give tasks by the assessor. Seating clients in front also gives the assessor the advantage of making eye contact with the client and enables the assessor to read the client's facial expression as he/she answers questions.

Other formal test items found in an assessment center to facilitate assessment include; the school readiness test and the screening test for children of six months to six years of age. On the one hand, the school readiness test focuses on five areas of readiness which are; visual discrimination, auditory discrimination, visual memory, auditory memory, and comprehension. On the other hand, screening test for children of six months to six years focuses on diagnosing difficulties in; motor, visual, hearing, mental, speech and language problems, emotional problems as well as epilepsy.

Valuable information must come from various sources including; parents, teachers, specialists, and by using a variety of assessment approaches. All tests are required to be administered on an individual basis and conducted in a non-discriminatory way according to IDEA requirements (Pierangelo, 1998).

Norm referenced tests and criterion referenced tests are both important in providing information that may lead to a sound evaluation of a child suspected of having mental retardation. On the one hand, norm referenced tests are standardized tests and are linked to inter-individual differences. They compare performance with a representative sample of children and give performance relative to other age mates. On the other hand, criterion referenced tests are associated with intra-individual differences. A child's performance is compared to a particular level of mastery thus exposing a child's strengths and weaknesses (Hoy & Greg, 1994) as quoted in Gargiulo (2006).

Psychologists use standardized tests which have been tried out on children of different ages on a fairly large population, which are valid and reliable. A valid test should really test the ability or behavior that it is supposed to test. A reliable test is the one that has been proved to be consistent so examiners can depend on it to produce the same score each time a particular child is tested. For example, the score would not change significantly if the child was tested by two different examiners. A good psychologist will report on a child's behavior in general during the testing situation as well as his or her intellectual abilities (Bala, 2004).

A battery of tests is recommended in order to get a good over-all picture of a child's intellectual ability, developmental level and his or her social competence. Intelligence tests, if well standardized and well administered can be a good measure of a child's present intellectual status (Clark and Clark, 1965) in Perry (1974).

According to Bala (2004), some of the most commonly used tests of intelligence and achievement used in assessing children for labeling purposes include; Wechsler Intelligence Scale for Children-Revised (WISC-R), Kauffman Assessment Battery for Children ( KABC-sequential and simultaneous processing), Wide Range Assessment Test –Revised (WRAT-R), Peabody Individual Achievement Test –Revised (PIAT-R), and the AAMD Adaptive Behavior Scale.

Wechsler Intelligence Scale for Children-Revised is designed as a comprehensive measure of cognitive ability for children. This test is for the population of six to sixteen years of age and takes 50-75 minutes to administer. Scores in WISC-R are on verbal and performance abilities. The test constitutes 13 sub tests, six of which are in the verbal scale tests and uses language based items, and seven of which are performance scale tests which use visual motor items that are less dependent on language. WISC-R is used for assessing children's intelligence (Sattler, 1992).

Kaufman Assessment Battery for Children (sequential and simultaneous processing), is designed for assessing cognitive development in children of two and a half to twelve and a half years normed at six months intervals and takes 40-85 minutes to administer. KABC consists of sixteen subtests which are grouped into; mental processing set and achievement set which yield separate overall scores. The mental processing set is grouped into those requiring primarily sequential processing of information and those requiring simultaneous processing with separate overall scores for each. This test is used as a component of a cognitive battery in clinical situations (Sattler, 1992).

Wide Range Assessment Test-Revised, is designed to measure reading recognition, spelling and arithmetic computation. This test takes 20-30minutes and is used on two levels of the population, the first one being children of five to eleven years and the second level being for the age of twelve to sixty-four years. WRAT-R's suggested uses include comparing the achievement of one

individual to another, determining learning disability and informally assessing error patterns to plan instructional programs (Sattler, 1992).

Peabody Individual Achievement Test-Revised is designed for the purpose of determining individuals' scholastic attainment for children at kindergarten level to those at the age of twelve. PIAT-R tests children in six content areas which include; general information, reading recognition, reading comprehension, mathematics, spelling and written expression. It takes 75 minutes (Sattler, 1992).

AAMD Adaptive Behavior Scale is designed to measure children's personal independence and social skills. This test which takes 30-120 minutes is meant to be used in screening and placement of persons from the age of three to adulthood who have mental retardation and those who are emotionally maladjusted. In determining MR, adaptive behaviors are important in that they determine an individual's effectiveness in meeting the standards of personal and social responsibility expected of his/her age and cultural group. It is recommended for use as part of classification or diagnostic battery in screening and placement decisions regarding persons with mental retardation (AAMD, 1992).

### **2.5.5 Placement and Intervention**

Intervention for children diagnosed as having MR is backed by legislation and takes various forms. In the USA, educational intervention is backed by law so

that children and adolescents with MR or related developmental disorders are entitled to FAPE (AAMD, 1992). Appropriate intervention should be based on the needs of the child as determined by a team of professionals and should address the priorities and concerns of the family and be provided in the least restrictive most inclusive setting where a child has the opportunity to benefit from interacting with non disabled peers and the community resources available to all other children (Biasiani et al, undated).

In Kenya, the National Special Needs Education Policy Framework (2009) dictates that children with SNE are entitled to education in an inclusive setting together with other children in the regular schools. This policy framework notes that in Kenya, there have been various policy recommendations given by education commissions and committees which have been used to guide on provision of education for learners with SNE and other disabilities dating back to 1964. However, most of these past recommendations have not been put into legal documents or harmonized for smooth provision of SNE.

The Kenya Education Commission (Ominde Report, 1964) recommended that children with mild handicaps be integrated to learn in regular schools. The National Education Commission (Gachathi Report, 1976) recommended the early intervention and assessment of children with special needs, and the development of a policy for integrating learners with special needs. The Presidential Working Committee on Education and Training for this Decade and Beyond (Kamunge Report, 1988) emphasized the deployment of SNE inspectors at the district level. The Totally Integrated Quality Education and

Training Commission (Koech Report, 1999) recommended the establishment of a national SNE advisory board and noted that there was no comprehensive SNE policy or legal framework in Kenya.

The Persons with Disabilities Act (2003) provides a comprehensive legal framework which outlaws all forms of discriminative treatment of persons with SNE including access to education and training. The Children's Act (2001) harmonized all the existing laws and policies on children with the aim of improving the well being of all children irrespective of whether they are disabled or not. The Sessional Paper number one of 2005 underscores the government's commitment to ensuring that learners with SNE have access to quality and relevant education.

The National SNE Policy Framework (2009) says that the government should provide an enabling environment for the education of learners with SNE through the provision of a flexible curriculum, providing trained personnel, equipment and facilities and ensuring an accommodative physical infrastructure for learners with SNE. The Education Act-Cap 211 (Revised in 1980) affirms the principle of inclusive education in Kenya by stating that, no pupil shall be refused admission to school on any grounds (The National Special Needs Education Policy Framework, 2009).

Intervention services for learners with MR can be home based, school based or a combination of the two. School based placement can take any of the following forms; placement in a special school, placement in a special unit

within a school and placement in a regular school or inclusion. Placement in a regular school can be full time inclusion or it can be part time inclusion where the child with a disability attends special class part time. A child with a disability can also be placed in a special school and attend regular school part of the day. It should be pointed out that legislation and SNE policy statements advocate for inclusion of children with disabilities (The National Special Needs Education Policy Framework, 2009).

According to Biasini et al (undated), nature of the services provided to infants once appropriate placement is done should depend on the assessment results and family priorities for the child. These should be used to develop an individual family service plan which includes all participating parties and is coordinated by case manager who is acceptable to the family. Services may include; assistive technology, intervention for sensory impairments, family counseling, parent training, health services, language services, nursing intervention, nutritional counseling, occupational therapy, physical therapy case management and transportation services.

Preschool and school age services need to focus on improving a child's skills and may include family or parents focused activities. The services given here include; SNE services by a certified SNE teacher, child counseling, occupational and physical therapies, language therapy, recreational activities, school health services, parent training and counseling services which should be given in a least restrictive setting in a regular school or a child's home(Biasini et al, undated).

Social or interpersonal intervention can be therapeutic or preventative as children with mental retardation are prone to behavior disorders. A variety of group social and recreational activities should be included in the child's program. These activities should include non disabled peers and may include participation in; birthday parties, ball games, movies, play, and excursions. The goal of these activities would be to train appropriate social skills relevant to the group participation and building self esteem (Biasini et al, undated).

Therapeutic intervention may include family therapy, individual child behavior therapy, parent training, and group therapy for children with mild mental retardation focusing on development of appropriate social skills. Child behavioral intervention can be used to train; self care, vocational, leisure, interpersonal and survival skills. Disruptive behaviors such as tantrums, self-injury, non compliance and aggression are handled through therapeutic intervention (Batshaw and Perret, 1992).

The family is an invaluable source of information or resource in evaluating and treating children with mental retardation. It should be included in every phase of intervention, from identification to planning, and through implementation and monitoring. To encourage parent participation calls for them being viewed as equal partners by the professionals in the planning and decision making (Sheerenberger, 1983).

### **2.5.6 Assessment Services in Kenya**

The report of the National Committee on Educational Objectives and Policies (Gacathi Report, 1976) suggested that coordination of diagnostic activities was one of the ways of improving and expanding SNE in Kenya. The need for appropriate and early assessment was recognized by the Ministry of Basic Education as far back as 1981. A Draft Policy Paper (Yellow Document) by the ministry stated that inexpert assessment resulted in improper placement (Ndurumo, 1993).

In an effort to solve the problems delineated in the policy paper, and in line with the recommendations of Gachathi Report (1976), the Ministry of Education in 1984 undertook to establish Educational Assessment and Resource Services (EARS) in 17 Educational Assessment and Resource Centers (EARC's) throughout the country funded by the Danish government through DANIDA and the Government of Kenya. Nyeri EARC was started in June 1986.

According to Kenya Institute of Special Education (KISE) guidelines dated August, 1988, when KISE was being planned, it was decided to establish one assessment center at the institute. But due to the great need for assessment services, a plan was drawn up in the last part of 1983 to decentralize these services to each of the 41 districts of the country then. On 16/1/1987, an agreement was signed between the Government of Kenya and Danish

government concerning the extension of EARS project. It was envisaged that on 1/9/1988 each of the 41 districts in Kenya would have its own EARC, and approximately 150 sub-centers would have been established.

Before the establishment of EARC's, training and education of handicapped children was begun once children reached school age instead of much earlier. One-third to one-half of all handicapped children in many special schools were incorrectly placed due to lack of assessment before admission and only a small proportion of handicapped children received training and formal education(Kochung, 2003).

Report of the Presidential Working Party on Education and Manpower Training for the Next Decade and Beyond (Kamunge Report) of 1988 reported that by September 1988, over 28,000 children had been assessed in 40 centers. Totally Integrated Quality Education and Training (TIQUET) report of the Commission of Inquiry into the Education System of Kenya, August 1999 (Koech Report, 1999) said that EARS coordinated 44 assessment centers in 44 districts. Koech (1999) reported that there had been dependence on DANIDA and therefore no building of mechanics for local funding of EARS and so when DANIDA left in 1994 assessment services deteriorated. According to the Task Force of 2003, there were 72 EARCs in Kenya. 52 had physical facilities and some assessment tools, while twenty had neither the physical facilities nor the tools to carry out their activities.

## **2.6 Inappropriate Referral and Placement**

The result of inappropriate referral is an inappropriate label which places the child in an inappropriate program which has inadequate provision for his or her needs and therefore uncaring. The child is denied the normal life experiences and wholesome community life. The Task Force on Special Needs Education in Kenya (2003), after finding out that an overwhelming number of EARCs did not have qualified assessment staff, nor did they have the materials to effect proper assessment, concluded that the personnel that did assessment were incompetent and made inappropriate decisions in labeling and placement.

To deal with the problem of improper assessment procedures and the resultant wrong placement decisions, Robert Rueda (1989), in Cline (1992), suggested the need to improve the accuracy of referrals, trying to develop more appropriate assessment and working towards having more mainstream placement.

## **2.7 Summary**

Special needs education is provided to meet the unique needs of children who deviate from the norm and it should be provided in a manner backed by law. Mental retardation is defined and categorized for the purpose of determining the most appropriate provision of services. The four categories explained are; mild, moderate, severe and profound mental retardation. Children who are labeled as having mild mental retardation should fit in regular schools and have

the appropriate corrective measures given from there, while those with profound mental retardation cannot fit in either the regular nor in special schools as they are totally dependent.

Referral for special education services should only be initiated when the source of difficulty is primarily within the child and suspected to be a handicapping condition. Parents or guardians must agree and accept that their child be singled out for assessment, and must give approval for the placement of their child in any appropriate program. Assessment and Placement decisions must be made by a team of professionals as mandated by the Education for All Handicapped Children Act of 1975 (PL-142). The team of specialists is obligated to use appropriate tools and not to depend on the findings of just one test or a single evaluator to make the placement decision.

Extreme professionalism should be applied for assessment to be effective, since instructional practices and curriculum content can be the source of the problem rather than from within the child. With inappropriate referral guidelines and incompetent assessment process, the child who has undergone the assessment process is more than likely to come out of the whole exercise with a wrong label and possibly a wrong placement.

Effective early identification and intervention strategies should be based on multidisciplinary team approach to assessment, clear referral and accurate assessment. This calls for the provision of adequate and appropriate tools and skilled manpower for early identification, assessment and appropriate

placement of children with special needs in education. While the countries of USA and UK have specific legislations backing the provision of assessment services, it is worthy to note that in Kenya, no legislation governing the conduct of assessment and placement of children with various disabilities has been formulated.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Research Design**

Since the researcher had no control over the variables (Kothari, 2004: 3), a descriptive design was used to describe the operations at Nyeri Central EARC and to report the impressions of all the persons who participated in the study. Data was collected by a descriptive survey method using interviews. This was because interviews give a full understanding of an individual's impressions or experiences. Observation and document analysis were used to get a picture of the process of assessment and placement to the special schools.

#### **3.2 Independent and Dependent Variables**

Assessment tools, materials, procedures, and the assessment personnel were the independent variables, while appropriate assessment and appropriate placement of children with mental retardation were the dependent variables.

#### **3.3 Location of the Study**

The study was conducted in Nyeri Central and Tetu districts of the Central Province of Kenya, about 150 Kilometers to the north of Nairobi. The main economic activities include, growing of food crops and horticulture, diary farming and cultivation of cash crops like coffee on the lower parts and tea on the higher grounds neighboring the Aberdare Mountains to the West.

Nyeri Central district EARC was chosen for this study because the assessment center there which was started in 1986 was one of the earliest to be established in Kenya. The Task Force on the Special Education (2003) found out that only 10% of the EARCs in Kenya were appropriately equipped to carry out assessment, and it was important to establish the status of Nyeri Central EARC in meeting those criteria.

### **3.4 Target Population**

Allamano and Wandumbi special schools for learners with mental retardation in Tetu district, the personnel at Nyeri Central EARC, and the parents of children suspected of having mental retardation formed the study population. The multidisciplinary team was also targeted for the study. The year 2009 enrolment figures indicated that there were 71 pupils at Allamano special school, and 111 pupils at Wandumbi special school. Nyeri central EARC had three assessment teachers and two workshop personnel, with the three assessment teachers being involved with the actual assessment and placement of children.

#### **3.5.0 Sampling Techniques and Sample Size**

The sample for this study was twofold. The first part of the sample comprised of the persons involved in assessment and placement. These included the head teachers of the two special schools for learners with mental retardation, the assessment personnel in charge of assessment of children suspected of having mental retardation at Nyeri Central EARC, and the parents who brought their

children for assessment during the study period. The second part of the sample comprised the referral documents used to admit pupils to the special schools.

### **3.5.1 Sampling Techniques**

Purposive sampling technique was used to select the two head teachers and the assessment personnel. The head teachers of the two special schools and the assessment personnel were selected by virtue of their positions in relation to assessment and placement of learners with mental retardation. Convenient sampling was used to select five parents who presented their children for assessment on a first come first served basis.

Admission documents were selected using simple random sampling. Serial numbers of the admission referrals from each one of the four classes in each school were copied on small pieces of paper. They were then folded and put in bowl where they were thoroughly mixed. In each school, ten folded pieces of paper were drawn and opened to reveal a serial number. Each revealed serial number which represented an individual child's admission number, and the admission referrals corresponding the chosen serial numbers were picked for the study.

### **3.5.2 Sample Size**

The persons involved in assessment and placement made up a sample of eight which included two head teachers, one assessment teacher, and five parents. In

addition twenty admission documents comprising of ten documents from each school were used for the study.

### **3.6.0 Research Instruments**

For the purpose of this study, data was collected using the following instruments; interviews, observation checklists and document analysis.

#### **3.6.1 Interviews**

Interviews afforded the researcher an opportunity to develop relationships with the participants so that the researcher could get the full range and depth of information from them. Moreover interviews were flexible with the participants, which enabled the researcher to seek enlightenment on issues that appeared not be clear as well as ensuring that participants gave maximum responses.

Those who were interviewed were the heads of the two special schools to establish how admissions to their schools were done. The researcher also tried to establish whether the head teachers considered any of their pupils to be wrongly placed. In qualitative research, feelings and insights are considered important (Orodho and Kombo, 2002). Therefore interviews helped the researcher to get the feelings and insights of the assessment personnel about the assessment and placement process. Parents of the children who attended EARC helped the researcher to establish why their children were referred for

assessment. The researcher constructed the questions that guided the interviews (appendices i, ii, and iii).

### **3.6.2 Observation Checklists**

In conducting this study, observation checklists were used because observation made it possible for the researcher to view operations as they occurred without interfering with the work at the EARC. Observation had the added advantage of letting the researcher adapt to events as they presented themselves. A checklist (appendix iv) was used to record observations of how assessment was conducted. A checklist to observe the proceedings of the multidisciplinary team's roundtable conference (appendix v) was not put to use since such a conference never took place during the study period. The assessment room observation checklist was not analyzed in this study but was used by the researcher to compare the EARC at Nyeri Central with the outlook of an assessment center that meets the basic conditions to effectively conduct assessment according to Bostock (2006).

### **3.6.3 Document Analysis**

The researcher got comprehensive and unbiased information which already existed at the EARC and the two special schools by reviewing the documents that were available, without interfering with their routine. The background information questionnaire and the referral form which doubled up as the admission document at the two special schools were analyzed (appendices x and xi). The school readiness test (appendix xii), and a screening test for

children (appendix xiii) were not available at the EARC so they were not analyzed. Analyzing the available documents helped the researcher to know their sources and contents. Perusal of the referral form (appendix xi) which was the document used to refer a child for admission to a special needs education program was guided by a checklist (appendix iv). Assessment tools (appendices x xii, and xiii) were analyzed using a checklist (appendix vii).

### **3.7.0 Pilot Study**

The pilot study was carried out in two phases at two different locations. The first part of the piloting which comprised of the research instruments in the form of interview schedules for the head teachers (appendix i) and the referral to special schools for admission (appendix xi) were piloted at Karatina Special School for children with mental retardation in Mathira West district. Both Mathira West district and Tetu district had been administrative divisions in the previously larger Nyeri district, and children from both districts were usually referred to the Nyeri Central EARC for assessment and placement. The instruments piloted at Karatina special school were found to effectively elicit the desired information as the researcher was able to establish from the head teacher that there were cases of suspected wrong placement. The researcher was also able to peruse the referrals for admission to the school and got to know their contents which indicated why individual learners were admitted to the school.

The second part of the piloting which focused on the interviews with the assessment personnel and the parents, observation checklists for the assessment tools and materials, the assessment process, referrals for assessment, the multidisciplinary team round table conference, referrals for assessment, and the assessment room observation (appendices ii, iii, iv, v, vi, viii and ix) were all piloted at Kenya Institute of Special Education (KISE) assessment center. The researcher chose KISE assessment center for piloting these instruments because it was the pioneering EARC in Kenya, and was therefore expected to meet all the requirements of an effectively functioning assessment center in terms of personnel, equipment, assessment tools and materials.

All the instruments were found to effectively elicit the required information except the multidisciplinary team conference observation which did not take place. Thus the tool (appendix v) was not used. In addition, the assessment tools and materials (appendices x, xi, xii, and xiii) were found to be in use at KISE assessment center. The list of materials that should be found in an assessment center (appendix xiv) was also obtained from KISE assessment center and was later used by the researcher to compare with the materials found in use at the Nyeri Central EARC.

Piloting was done to ascertain the effectiveness of the instruments in eliciting the desired information, and the instruments were modified accordingly where they were found wanting. At the piloting stage at KISE, the researcher observed five assessment sessions which involved children referred for

different reasons. During the observations and by talking to the assessment personnel at KISE, the researcher established that children brought for assessment were never attended at their first appearance but they were given an appointment to be brought for assessment at a later date. This was to allow their parents/guardians to obtain referral reports from the regular schools. After reading the child's report, the assessment personnel at KISE captured the child's information including the developmental milestones and at the same time observed the child.

Different assessment tools and materials (appendices x, xi, xii and xiii) were used to obtain the information and the assessor wrote down a summary of the findings at the last page of the questionnaire (appendix x). The assessor discussed the findings with the parent and then wrote a referral for placement or for further assessment. The assessor also wrote an assessment report with suggested intervention strategies to accompany the referral which was again discussed with the parent before it was sealed and surrendered to the parent.

### **3.7.1 Validity**

Piloting of the research instruments helped the researcher to determine the appropriateness and comprehensiveness of their content. The researcher was also able to establish the appropriateness of each tool's format through piloting. The researcher was able to interpret the data that was generated during the

study within the context of the literature review, and therefore considered the tools to be valid (Mason, 1996).

### **3.7.2 Reliability**

Reliability of the research instruments was established by the fact that the researcher was able to obtain the required information during the study after having made the necessary modifications to the instruments at the piloting stage. The use of multiple methods in data collection by the researcher in order to corroborate data sources increased the reliability.

### **3.8 Data Collection Techniques**

According to Geertze (1993), the purpose of data collection is the accurate representation of the phenomena under study using detailed description. Semi-structured interviews were used to collect the relevant information from the head teachers, the assessment teacher, and parents of children who attended the assessment center during the period of the study.

The interviews with the head teachers were aimed at establishing the process of admitting learners in their schools and whether their schools had any wrongly placed learners. Interview with the assessment personnel sought to determine how assessment was conducted, what assessment tools were available, and who made the placement decision. Interviews conducted with the parents were intended to verify whether they were in agreement with the referrals of their

children for assessment and what role these parents played in arriving at the referral decision.

Observation checklists were used to determine how assessment was done, specifically how the tools were used, and who was involved in assessment. The researcher used observation to find out how the assessment center was furnished and equipped to determine its suitability for conducting assessment.

Documents perused at the EARC were the assessment tools and materials used in the assessment process. The objective of examining these documents was to determine their contents and instructions for their usage. The documents studied included the background information questionnaire (appendix x) the referral document for admission of individual learners to the special schools (appendix xi).

### **3.9 Data Analysis**

The researcher used multiple methods of analyzing data to get more than one perspective on the assessment and to corroborate the findings. Interview data obtained from the head teachers on placement of children with mental retardation to their schools (appendix i) was analyzed in a table using percentages (table 4. 1) to indicate enrolment and the number of children thought to be wrongly placed. Information by the head teachers pertaining to how children were admitted to their schools was thematically analyzed.

Data obtained from the assessment personnel and the parents (appendices ii, and iii) with regard to referral and assessment procedures were analyzed according to the emerging themes (Kombo & Tromp, 2006). Observation data on the assessment room equipment and furnishing was analyzed on a linear rating scale (table 4.2) and converted into a percentage. Parents impressions of the referral and assessment services offered at the EARC were analyzed on a graphic rating scale (appendix iii). Wrong placement figures, as judged from the responses by the head teachers, were displayed in a table (table4.1) and interpreted in percentages.

### **3.10 Ethical Issues in Data Collection**

The researcher explained the purpose of the study to the interview respondents, and later debriefed them at the end of the study. During the interviews, the researcher recorded only what the respondents said. On observations the researcher recorded only what was observed at the time of the study. The researcher further examined only the documents relevant to the study, and finally promised to report back the findings of the study to the respondents.

## CHAPTER FOUR

### DATA PRESENTATION, ANALYSIS, AND DISCUSSION.

#### 4.0 Introduction

This chapter presents, analyzes, and discusses data. The study was aimed at finding out the factors affecting assessment and placement of children with mental retardation by the Nyeri Central EARC. The Task Force on Special Needs Education in Kenya (2003) found out that an overwhelming number of EARCs in Kenya made inappropriate labeling and placement decisions because they did not have appropriate assessment personnel and materials. The National SNE Policy Framework (2009) also notes that assessment teachers posted to the EARCs are either not well trained in assessment or lack necessary facilities to assess learners with SNE. This study therefore attempted to answer the following research questions;

1. What were the professional qualifications of the persons involved in the assessment and placement of children suspected of having mental retardation at Nyeri Central EARC?
2. What tools and materials were used in assessment at Nyeri Central EARC?
3. How was assessment and placement carried out at Nyeri Central EARC?
4. What factors could contribute to wrong assessment and placement of children suspected of having mental retardation at Nyeri Central EARC?

Responses to the questions were obtained from interviews with the head teachers of two special schools in Tetu district, the assessment teacher in charge of assessing children suspected of having MR at Nyeri Central EARC, and five parents who brought their children for assessment. In addition the documents used at the EARC to facilitate the assessment and placement decisions were perused to ascertain their contents.

**Table 4.1: Enrolment of Pupils in the Two Special Schools in Tetu District.**

<b>School</b>	<b>Boys</b>	<b>Girls</b>	<b>Total enrolment in the special Schools</b>	<b>Enrolled in special schools but attending regular schools</b>
<b>Allamano</b>	<b>36</b>	<b>35</b>	<b>71</b>	<b>4</b>
<b>Wandumbi</b>	<b>64</b>	<b>47</b>	<b>111</b>	<b>7</b>
<b>Total</b>	<b>100</b>	<b>82</b>	<b>182</b>	<b>11</b>

The two schools had a total enrolment of 182 children 100 boys and 82 girls. Allamano had 36 boys and 35 girls, while Wandumbi had 64 boys and 47 girls. Out of the two schools total enrolment, 11 children attended regular schools because they were thought to be wrongly placed in the special schools. Four of the children were enrolled in Allamano special school while seven of them were enrolled at Wandumbi special school (table 4.1).

**Table 4.2: Assessment Statistics from Nyeri Central EARC.**

<b>Year</b>	<b>Total Number Assessed</b>	<b>Mental Retardation</b>	<b>Percentage of MR</b>
<b>2002</b>	<b>44</b>	<b>14</b>	<b>31.82</b>
<b>2003</b>	<b>78</b>	<b>14</b>	<b>17.92</b>
<b>2004</b>	<b>98</b>	<b>36</b>	<b>36.73</b>
<b>2005</b>	<b>131</b>	<b>49</b>	<b>29.03</b>
<b>2006</b>	<b>114</b>	<b>45</b>	<b>39.47</b>
<b>2007</b>	<b>127</b>	<b>28</b>	<b>22.05</b>
<b>Grand total</b>	<b>592</b>	<b>186</b>	<b>31.42</b>

The table above indicates that a total of 592 children were assessed from 2002 to 2007 at the EARC. Out of the 592 children assessed, 186 were found to have mental retardation, representing 31.42% of all children who were assessed and placed by the center (table 4.2).

#### **4.1 The Professional Qualifications of the Assessment Personnel at Nyeri Central EARC.**

What were the professional qualifications of the personnel involved in the assessment and placement process at Nyeri Central EARC? This question was posed to the coordinating assessment teacher who is also responsible for assessing children suspected of having mental retardation using the interview

guide (appendix ii). The question was repeated to the assessment teacher in relation to the other professionals' involved in assessment when the researcher sought to know whether a multidisciplinary team approach was employed when conducting assessment at the EARC.

According to the coordinating assessment teacher, Nyeri Central EARC had had three assessment teachers catering for mental retardation, hearing impairments, and visual impairments respectively. These assessment teachers were experienced in their work having worked at the EARC for between ten and twenty years. The assessment teachers in the areas of mental retardation and hearing impairments were SNE diploma holders from KISE, while the assessment teacher in the area of visual impairments had an SNE certificate from KISE. Each one of the assessment teachers handled assessment in the area of his/her specialization.

Although the coordinating assessment teacher who responded to the interview questions said that all the three assessment teachers at the EARC had undergone SNE training, this finding did not in any way prove that they were trained in assessment and confirmed an observation by the National SNE Policy Framework (2009) that assessment teachers at the EARCs in Kenya are not well trained and work with the knowledge they acquired when they trained as SNE teachers.

To further ascertain the professional qualifications of the personnel involved with assessment at the EARC, the researcher asked the assessment teacher whether a multidisciplinary team approach in assessing children suspected of having MR was applied at the EARC. The assessment teacher responded that the team of professionals approach in assessment at the EARC was largely limited to the EARC and the ministry of health personnel. The EARC made referrals of children who required medical attention to the medical personnel, who on their part gave a feedback to the EARC before intervention measures were decided on. The assessment teacher went on to explain that at no time did the EARC personnel sit at a roundtable conference with other professionals to plot the course of placement and intervention strategies for children who had undergone assessment. This state of affairs suggested that the assessment and placement process at Nyeri Central EARC lacked the input of other professionals which could easily lead to erroneous diagnosis and mislabeling of children and end up making wrong placement. Reynolds (1983) argues that a round table conference to report assessment results and make a placement decision must be held after each professional has had a chance to evaluate a child.

When assessment and placement decisions are left to one professional as was the case at Nyeri Central EARC, there is a reason to question its effectiveness. The researcher felt that a team conference even where it involved the assessment teacher, the child's parent/guardian and a medical personnel would discuss the assessment results in a more objective manner and therefore lay out

an effective intervention strategy for a child. Each member of a multidisciplinary team as spelt out by Bala (2004) has a role to play which cannot be adequately played by another professional because each team member addresses a specific professional aspect in as far as the child suspected of having mental retardation is concerned.

#### **4.2 The Tools and Materials Used in Assessment at Nyeri Central EARC**

Which tools and materials were used in assessment at Nyeri Central EARC?

This question was posed to the assessment teacher by the researcher who also observed the assessment sessions to find out the tools and materials that were put to use during the assessment sessions (appendices ii and iv). The researcher used the assessment tools and materials checklist (appendix viii) and the list of materials for EARC found at KISE assessment center during the pilot study (appendix xiv) to establish what was available in terms of assessment tools and materials at Nyeri Central EARC. The researcher also observed how the assessment room was equipped to find out how far it met the requirements suggested by Bostock (2006) and those set out by the British Journal of Special Education (2007).

From inquiry and observation, the researcher established that the following assessment tools and materials which were available for use at the EARC:

1. A background information questionnaire (appendix x).
2. A referral form (appendix xi).
3. Colored wooden blocks.

4. Puzzles and jigsaws.
5. Wooden pieces with letters and numbers.

The assessment tools found at Nyeri Central EARC did not compare very well with the basic requirements of an EARC which the researcher had established during the piloting stage of this study at KISE assessment center. The assessment tools that the researcher expected to find but did not find at Nyeri Central EARC were the school readiness test (appendix xii) and the screening test for children of six months to six years of age (appendices xiii). The materials found at Nyeri Central EARC in the form of colored wooden blocks, wooden letter and number pieces as well as a jigsaw puzzle were very few compared to the list of materials that an EARC should possess (appendix xiv).

According to the researcher, the background information questionnaire found at Nyeri Central EARC (appendix x) did not qualify as an appropriate assessment tool. This is because the questionnaire was largely used to gather information about the child from a parent or a guardian without adequately addressing the cognitive, intellectual, social and emotional problems of the child. These are the areas of focus in assessing a child suspected of having mental retardation (Gargiulo, 2006). For a child to be labeled as having mental retardation and subsequently be placed in an appropriate SNE program, his or her intellectual deficits must be accompanied by deficits in more than two adaptive behavior areas (AAMD, 1992). The researcher had listed some of these adaptive behaviors (appendix vi), for the purpose of cross checking with

the assessment tools in use at the EARC to find out whether they were addressed or not. By not addressing these adaptive behaviors, the researcher felt that the assessment tool (appendix x) was not effective in assessing children suspected of having mental retardation and could lead to wrong placement.

The other document in use at the EARC was the referral form (appendix xi) which was used to refer a child for placement after the completion of the assessment exercise. This referral did not give detailed assessment results nor did it hint at the required intervention strategies for a child. Successful assessment requires both formal and informal assessment tools which must be presented to a child individually by person who is qualified to do so. Clark and Clark (1965) as quoted in Perry (1974) say that well standardized intelligence tests give a child's intellectual status. The absence of the school readiness test (appendix xii) and the screening test for children of age six months to six years (appendix xiii) meant that the EARC could not adequately address cognitive as well as adaptive skills areas of an individual child.

In as far as meeting the requirements of the assessment materials and equipment, the researcher found out that Nyeri Central EARC did not possess a wheelchair, dress up clothes, feeding and cleaning effects among other requirements (Bostock, 2006). In addition the researcher found out that the EARC did not possess a skills assessment sheet (British journal of special education, 2007). The absence of the skills assessment sheet coupled with the

lack of the screening test for children of six months of age to six years of age meant that Nyeri Central EARC did not have a formal way of evaluating adaptive skills and therefore assessment results for any child suspected of having mental retardation would not be comprehensive as adaptive skills areas would not be effectively evaluated.

Having established how Nyeri Central EARC was equipped for assessment, the researcher asked the assessment teacher whether the available assessment tools and materials adequately served the purpose of assessing children suspected of having mental retardation. The assessment teacher felt that they did not, which he attributed to the absence of the two assessment tools (appendices xii and xiii), and design of the two available documents; the background information questionnaire (appendix x), and the referral form (appendix xi) from the Ministry of Education. These documents did not address specific areas of concern exhaustively nor attempt to give comprehensive assessment results.

The assessment teacher however felt that the wooden blocks, the puzzles and jigsaws as well as the wooden letters and numbers served well in giving the assessor a fairly good picture of a child's functioning even when presented without written guidelines. Pierangelo (1998) argues that any assessment instrument presented to a child must have both the instructions for its application and also the scoring methods which in effect determine pass or failure. It would therefore make sense for the use of the wooden blocks and the wooden letters and numbers to be guided by some written instructions of the

intended outcomes. So while these materials are very useful in trying to determine a child's performance, they may not be very helpful as guides to determining an appropriate placement unless clear guidelines on their administration and analysis of their results are written down and used to direct the assessor during assessment sessions.

#### **4.3 Assessment Process at Nyeri Central EARC**

To be able to answer the question on what procedures were involved in the assessment process, the researcher observed five assessment sessions spread over two Wednesdays. The sessions were relevant to this study because they involved the assessment of children suspected of having mental retardation. The researcher used the observation checklist (appendix iv) to record what took place during the assessment sessions. The researcher also asked the parents accompanying their children for assessment what they thought about the assessment process and how they rated it (appendix iii).

As a preliminary point the researcher observed the assessment room (appendix ix) to find out whether it was adequately equipped (Bostock, 2006). The assessment room was spacious and accommodated two tables and four chairs. The assessor sat behind one table which had two chairs in front where the child being assessed and his or her parent sat. The other table where one chair was located was used as a working area for the child to carry out the various tasks using different assessment materials or when working with pen and paper. When a child was working at the second table, the assessor would move from

his table to go and stand near the child as he gave directions to the child on what to do. Some assessment materials were placed on a shelf to the left of the assessor while more were kept in a large cupboard which was just next to the entrance on the right hand side. The wall to the extreme right of the assessor's table was painted black where the assessor would occasionally write tasks for the child being assessed to complete as the assessment process went on.

After this initial look at the assessment room, the researcher asked the assessment teacher what were the necessary requirements before embarking on assessment. The assessment teacher said that the first thing that those seeking assessment services were asked to do was to produce a referral for assessment note signed by the head teacher and a class teacher's report for school age children. If these requests were not met, assessment still went on. To the researcher, this went contrary to the views expressed by Pierangelo (1998) that interviews and reports of the past and present teachers must be included if assessment was to be effectively done. The assessment teacher went on to explain that for children who are not attending school, referrals for assessment were normally signed by medical personnel. He said that sometimes referrals emanated from friends, relatives or even neighbors of the children coming for assessment and in such cases, no referral documents were expected from the clients.

The researcher observed five assessment cases (appendix iv), one of which was not of a school age child who had a referral from a local Health Center. Two

children were brought for assessment without any referral notes from their schools or any class teacher's report. Two other children who came for assessment brought written notes from their head teachers' requesting the EARC to assess them. None of the children brought their class teachers reports or carried some of their written school work. During the actual assessment, the assessor started by welcoming the clients to the assessment room and giving them seats. After the clients were settled in their seats, the assessor introduced himself and asked the clients their names and where they came from. He then asked about the school where the child to be assessed was attending school. If a child was not attending school the assessor enquired about their family members. During all the assessment sessions, the assessor addressed his clients in of Kikuyu language

After the preliminaries, the assessor produced the four page questionnaire (appendix x) for gathering background information about the child. It was the parents accompanying their children who provided the answers to all the questions with regard to among others; the child's health status, sensory, speech and academic difficulties. While the parent answered the assessor's questions, the child was given various tasks to perform using some of the materials that were in the assessment room. This took care of the segment on motor difficulties in the questionnaire because this was the time that the assessor observed the child to find out whether the child had any motor difficulties in carrying out the tasks that were assigned to him or her. After the assessment teacher had written down the details given by the parent, he wrote

summary notes on page four of the questionnaire. These notes summarized the assessor's findings and indicated what was thought to be the problem with the child. Finally the assessor made a recommendation on the action to be taken to help the child.

It is important to point out that the activities that the child was asked to perform were not directed by any written guidelines about their application neither were they scored and analyzed to determine the child's performance. The activities also did not follow a particular order when given to different children. For some children some tasks were omitted depending on their level of performance.

According to Pierangelo (1998) one test should never be the basis for making a placement decision. To be able to make an appropriate placement decision, a number of tests must be administered to the child and information sought from various sources such as parents, teachers, and medical personnel. After completing the questionnaire which took about two hours, the assessment process was over and the assessor ready to make a placement decision. To the researcher, the completeness of the assessment process and adherence to procedure omitted a crucial step as the assessor did not observe the children at their current settings to ascertain their performance (Pierangelo, 1998).

Based on the information captured by the questionnaire (appendix x), the assessment teacher filled the referral form (appendix xi). Depending on the

assessment findings, this referral form directed the child to be admitted in an SNE program or go to the hospital for medical attention. The details entered on this form were the child's age, gender, parents, and residence. After these preliminaries, important information about the tests used on the child, the impression or observation of the assessor after attending to the child, and the medical state of the child were entered. During this study, this referral (appendix xi) was filled for one child because only one out of the five cases observed was referred to an SNE program. For this child who was referred to a special unit, the assessment teacher gave the referral sheet (appendix xi) to the parent and told her to present it to the special unit for the child's admission. For the children who were not referred to an SNE program, the assessment teacher advised each one of the parents to go back to their previous placement in the regular school.

AAMD (1992) provides for a round table multidisciplinary conference to make a placement decision and Cline (1992) states that a follow up should be done to review these cases. Among the five observed assessment sessions, none of the children were referred to another professional for assessment, which suggested that multidisciplinary team approach was not in use at the EARC. To the researcher, the fact that the assessment process took a single session and used a single formal tool in the form of the questionnaire (appendix x) and made an entry in the referral form (appendix xi) to seek admission to an SNE program suggested that the assessment and placement process was not completely effective. As pointed out earlier in this document, the questionnaire to a large

extent ignored the adaptive behaviors aspect in mental retardation which suggested to the researcher that placement decisions were based on incomplete information.

#### **4.4.0 Factors that could Contribute to Wrong Assessment and Placement**

To find out the factors affecting assessment which determine the success of the process or lead to wrong placement, the researcher first asked the two head teachers they how admitted children to their schools (appendix i). The head teachers were categorical that admissions to their schools were only done after referrals were given by the EARC, and under no circumstances would they admit children without EARC referrals. The researcher then asked the head teachers whether there were cases of wrong placement in their schools, and what could contribute to the wrong placement. The head teachers said it was true that after their teachers had spent time with the newly admitted children, they were able to tell whether the concerned children were wrongly placed going by how their functioning levels.

On what they thought was contributing to wrong placement, the two head teachers' were categorical that wrong placement decision emanated from the EARC. They said that the EARC did not give the schools any assessment results nor did the EARC write any reports concerning individual children's functioning. The schools were therefore left to establish each admitted child's functioning level and plan an intervention program without much input from the EARC. The head teachers also felt that parents could contribute to wrong placement because some parents were reluctant to remove their children from

the special schools when it was pointed out to them that their children could be in the wrong placement. It was the children who were wrongly placed and whose parents did not want remove from the special schools that were placed in the neighboring regular schools to attend classes. The interviews with the head teachers revealed that a total of eleven children from both schools were attending the neighboring regular schools (table 4.1).

The researcher sought the opinion of assessment teacher in charge of assessing mental retardation on whether wrong placement could be made by the EARC and why this could come about (appendix ii). To start with, the assessment teacher pointed out that referral of children suspected of mental retardation to the EARC for assessment could be wrong in that regular class teachers could be trying to get rid of poorly performing children from their classes. The assessment teacher also felt that the process of assessment was flawed from the beginning when the referring regular class teacher failed to provide a child's report to the assessment center. Another flaw to the referral was the fact that the assessment personnel did not get the opportunity to observe a child in his/her current placement in the regular school. These two alternatives could form the baseline for the assessment teacher to begin the child evaluation. Another factor that the assessment teacher said could lead to the EARC making wrong placement decisions was the fact that some parents insisted on their children being placed in an SNE program once they had been singled out for assessment by the regular school teachers.

When asked by the researcher to comment on the assessment tools and materials available at the EARC, the assessment teacher said that the EARC did not possess most of the required assessment tools and materials. He cited the lack of the school readiness test and the screening test for children (appendices xii and xiii) as a pointer to the seriousness of the shortage of relevant assessment instruments experienced by the EARC. The researcher then asked the assessment teacher whether the few assessment tools and materials that were available were suitable for assessment, and the assessment teacher replied that they were unsuitable as they were not designed well enough to be able to elicit all the necessary information about a child suspected of having MR during assessment. For example, the assessment teacher pointed out that the background information questionnaire which was the only assessment document in use at the EARC did not provide for adequate assessment of adaptive behavior skills. Without diverse and relevant assessment tools and materials, the assessment center cannot be expected to be effective in coming out with the correct diagnosis after assessment because the available assessment tools and materials may not adequately address all the aspects of assessment.

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During the interview with the assessment teacher (appendix ii), the researcher sought to know whether a multidisciplinary approach to assessment was employed at Nyeri Central EARC. The assessment teacher replied in the negative. The researcher then asked the assessment teacher whether the lack of a multidisciplinary team approach to assessment could contribute to wrong

placement and the assessment teacher answered in the affirmative. The assessment teacher felt that contributions of more than one specialist in the decision making process would result in a more objective decision making process. AAMR (AAMD, 1992) stipulates that after each member of a team of professionals have had a session with a child who is being assessed, the team holds a roundtable conference where each one of the professionals report their findings and jointly make a decision on the best form of intervention to be employed for an individual child. In Kenya the use of multidisciplinary team approach in assessment and placement is yet to be formal and well structured (SNE Policy Statement, 2009). Therefore assessment and placement of children with SNE is left to one professional only, the assessment teacher.

Finally, the researcher asked the assessment teacher whether the EARC made a follow up of a child after having made the placement decision (appendix ii). The assessment teacher said that the EARC was not able to make follow ups because the funds availed to the EARCs for their operations by the MOE were usually very little or not availed at all for as long as two school terms. According to Cline (1992), once a child is referred for placement and an intervention program drawn, it is incumbent for the case to be reviewed from time to time through follow up visits. Therefore, had the EARC at Nyeri Central been able to make follow up visits, it is possible that the assessment personnel could very well come have across and review the placement of the children that the special school heads consider as being wrongly placed in these schools.

The assessment teacher also said that some profound cases of mental retardation were wrongly placed in special schools for children with mental retardation while as a matter of fact they would have best fitted in a home program (AAMD, 1992). The researcher sought to get a more clear picture on the matter of home programs placement to which the assessment teacher said was a difficult alternative to prescribe because the EARC did not have the capacity to monitor such programs due to lack of means of transport to monitor them.

According to the researcher, the reasons given by the assessment teacher and the two head teachers for wrong placement were due to lack of clear guidelines governing assessment and placement procedures. Interlinking of special and regular schools through proper dissemination of information about assessment services was also lacking. With the requisite formal and informal tools, the assessment process could be effective provided the appropriate professionals are involved. This may mean spreading the assessment process over several days and sessions to enable administration of several tests as well as involvement of different team members.

There were two clear omissions in the assessment process as pointed out earlier. These were the absence of interviews and reports from the past and present teachers of the child suspected of having mental retardation and the lack of observing a child suspected of having mental retardation in his or her

current educational setting (Pieranelo, 1998). According to the researcher, fulfilling the two conditions would have solved much of the dilemma about appropriateness of referrals for assessment.

#### **4.4.1 Possible Measure of Addressing the Problem of Wrong Placement**

The researcher asked the assessment teacher what were the possible measures of addressing the problem of wrong placement (appendix ii). The assessment teacher felt that to start with, the EARC needed to acquire some of the tools and materials that were not available especially the basic ones such as school readiness test, and the screening tests. In addition, EARC needed to make follow ups on all referred cases. The assessment teacher felt that the use of a multidisciplinary team approach in assessment and placement was crucial to the success of the whole process. By using a multidisciplinary team to make placement decisions, after appropriate formal and informal assessment tests, the assessment teacher felt that a lot of subjectivity in decision making could be avoided.

The assessment teacher also said that more diverse materials needed to be provided to the EARC to make the child more active during assessment. The questionnaire in use did not adequately address the child's abilities and weaknesses in different aspects of life that are considered in determining the child's level of deviance from what the society considers the norm. Much of the information sought by the questionnaire could be provided by the parent or guardian accompanying the child so the assessment teacher felt that the

questionnaire could be reviewed to incorporate activities or items that would specifically be responded to by the child.

On referral, the assessment teacher said that much needed to be done to improve on referrals since some of the referrals for assessment seemed to be uncalled for going by the fact that a majority of the children brought to the assessment center ended up going back to their placement in the regular school as EARC could not diagnose them as having mental retardation. Therefore clearly defined and stringent guidelines needed to be put in place to ensure that only deserving cases of suspected mental retardation were referred for assessment.

#### **4.4.2 Parents/ Guardians Rating of the Assessment Services.**

The researcher sought the opinion of the parents who brought children for assessment regarding the services they were given at the EARC (appendix iii). The interviews here sought to get the parents convictions about their children's problems, the advice they were given and or action taken by regular class teachers to refer and the decision made by the EARC.

When asked by the researcher why their children were referred for assessment, all the four parents of the school age children said it was as a result of poor academic performance in school and they all agreed that their children were not doing well in school. The fifth parent whose child was not yet enrolled in school had been referred to the assessment center by local health center

personnel. The researcher then sought to know whether the parents were told what would be required to be done about their children's concerns during the assessment sessions. Again all the parents said that they found the discussions held with the assessment teacher very helpful in helping them understand their children's' problems and the best course of action that could help address them. On the quality of services given to them by the EARC, the parents felt that the services were good and were satisfied with them. This rating translates to a score of four or 80% on a graphic rating scale of five (appendix iii).

On who had referred their children for assessment, again four the parents of the school age children said it was their children's class teachers who had initiated the referrals. The researcher then sought to know what the parents were told was the problem with their children by the assessor. In their responses which were divergent, two parents were told that their children needed to be given extra help in class by their class teachers. One parent whose five year child was not in school was advised to enroll her child in the pre-school and told that the child would be monitored to find out how he coped in school. Two more parents were told that their children required to be given work at a lower level so that they could gradually catch up with what they had not managed to achieve in their current placement.

The researcher also asked the parents what placement was recommended for their children, and three of them said that their children would retain their placement in their regular schools. One parent had her child referred to a

special unit. Finally the parents were asked whether they were satisfied with the services given at the EARC. The parents generally felt that they were more enlightened about their children's performance by the discussions that took place at the EARC. They were generally convinced that the course of action taken by the EARC was the best for their children and said they were satisfied with the services they were given.

#### **4.4.3 Examination of the Referrals for Assessment and Admission Documents.**

The intention of the researcher here was first of all to find out the reasons cited by the regular school teacher for requesting that a child undergoes assessment at the EARC. Secondly, the researcher wanted to find out the reasons that assessment personnel cited as they made placement requests to the special schools.

Referrals from school as observed by the researcher at the EARC during this study involved introductory notes from the head teachers. It was also noted by the researcher that schools could instruct parents to take their children for assessment verbally and not issue them with any written requests for assessment. After assessment, the referral form was issued by the assessor to be presented to special school for admission purposes (appendix xi). Referrals as envisaged by the researcher (appendices vi and vii) were not giving details about a particular child's state before assessment and also after assessment. On their part, referrals to the EARC involving an introductory note or when done

verbally did not give the assessor a reference point to start his/her assessment nor did referrals to special schools for admission tell these schools about a child's specific problems.

All referrals for admission (appendix vii) perused at the two special schools revealed that all had a similar entry saying mental retardation. To the researcher these documents meant that the referral process had shortcomings of giving details that were not very helpful to other persons other than those who wrote them. This is because these referrals did not explain the assessment results nor did they plot a cause of action to help the child overcome the problems that had led to referral for assessment in the first place. During the pilot study at KISE, the researcher had observed that each referral was accompanied by a written report on the findings of the assessment and gave intervention suggestions that would benefit the child.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.0 Introduction

The purpose of this study was to establish the factors affecting the assessment and placement of children with mental retardation at the Nyeri Central EARC to the two schools for children with mental retardation in Tetu district. To establish these factors, the study sought to establish the professional qualifications of the assessment personnel involved in assessment, and the tools used in the assessment at Nyeri Central EARC. The study also sought to find out how assessment sessions were conducted at the EARC, and whether wrong placement existed in the two special schools emanating from the EARC.

The reviewed literature touched on the general process of assessment, the persons involved in assessment and what is considered effective assessment and placement of children with mental retardation. Placement options and intervention measures were addressed too. The development and the current status of assessment centers in Kenya were also looked into with a special reference to the findings of the Task Force on SNE by the MOEST of 2003 which pointed out various deficits associated with EARCs work. Some of the serious shortfalls in the assessment centers in Kenya as the Task Force found out were; lack of infrastructure, lack of appropriate assessment tools, and lack of appropriately trained personnel to carry out assessment and placement. This study also sought to find out whether that general trend of incompetence as

found out in 2003 persisted at the Nyeri Central EARC if at all that was the situation in the first place.

This study laid its basis on the Report of the Task Force on Special Needs Education Appraisal Exercise (Kochung Report, 2003), which noted that assessment and placement of children with SNE in Kenya was faced with problems particularly the lack of qualified assessment personnel and appropriate assessment tools and materials. The legal requirements for guiding the assessment and placement of children with SNE that guided this study were largely borrowed from the Education for All Handicapped Children Act (PL-94-142) of 1975 and the Individuals with Disabilities Education Act (PL101-476) of 1977 in the USA and the 1981 Education act in the UK (Tomlison, 1982). This dependence on legislation from outside Kenya was necessitated by the fact that despite the existence of various policy guidelines for SNE emanating from the recommendations of different government commissions and committees since 1964, there was no legislation spelling out the requirements of assessment and placement of children with SNE in Kenya (The Special Needs Education Policy Framework, 2009).

The study drew its sample through purposive sampling. The sample for this study was twofold. The first part of the sample comprised of the assessment teacher in the area of mental retardation at Nyeri Central EARC, the head teachers of the two special schools in Tetu district, and five parents who brought their children for assessment during the study period. The second part of the sample was made up of the documents used in referring children to

special the schools after being assessed. These documents were drawn using simple random sampling and were examined at the two special schools where ten documents in each school were sampled. The researcher prepared and used a number of guiding interview questions and observation checklists to obtain data (appendices i to ix).

Effectiveness or success of the assessment and placement process was determined by the study based on the following considerations; the professional qualifications of the persons involved in the assessment and placement process, the assessment tools and materials found at the EARC and lastly the presence of children without mental retardation in the two special schools. It was also imperative to find out if a multidisciplinary team approach was in use at Nyeri Central EARC and how it functioned.

During the study, data was obtained from the interviews with the assessment teacher, the head teachers of the two special schools in Tetu district, and from five parents who brought their children for assessment. Data was also obtained from observation of the assessment process at the EARC and from perusal of documents relating to referrals for placement of children suspected of having mental retardation. Data was generally processed according to the themes that emerged, and where applicable tables were used.

### **5.1 Summary of the Main Findings**

This study found out that two assessment teachers at Nyeri Central EARC were certified SNE diploma holders and one assessment teacher had certificate level training in SNE. All the three assessment teachers were trained at KISE and therefore possessed the skills to conduct assessment based on the training they had undergone as SNE teachers. The EARC did not have a multidisciplinary team, and was poorly equipped in terms of assessment tools and materials. Some crucial assessment tools were unavailable at the EARC. The study also found out that as there was no multidisciplinary team approach, the assessment process took only one session and the placement decision was left to the assessment teacher and a child's parent.

The two head teachers said that wrong placement existed in their schools because they were forced to integrate a few of their pupils to the neighboring regular schools. The assessment teacher thought wrong placement could come about as a result of inadequacies related to lack of appropriate tools and materials for effective assessment. The assessment teacher also blamed regular class teachers for contributing to wrong placement by their lack of cooperation in giving information about the referred children.

The persons that this study established as the ones involved in assessment and placement of children suspected of having mental retardation at Nyeri Central EARC were the assessment teacher, the children's parents, and the children themselves. These three persons limited the scope of information gathering for

the purpose of making appropriate placement decisions. At least the regular class teacher, a social worker, a nurse, a psychologist and a rehabilitation counselor should have been involved to make the assessment and placement a team effort according to the Council for Exceptional Children (1977).

The assessment tools in use at the Nyeri Central EARC were limited to two. These were the background information questionnaire (appendix x) and the referral form (appendix xi). Some important tools which were not found at the EARC included; a school readiness test (appendix xii), screening test for children of six months to six years of age (appendix xiii), and a skills assessment sheet (British Journal of Special Education, 2007). The EARC also lacked equipment such as a wheelchair, dress up cloths, and house hold utensils and equipment among others. This equipment facilitates effective assessment in one way or another by facilitating the positioning of clients who cannot sit or walk independently. The equipment is also used in evaluating adaptive skills areas (Bostock, 2006).

By noticing some problem with a child and referring that child, the regular class teacher makes the first step in assessment (Cline, 1992). It was therefore this study's expectation that every child who was referred for assessment would be accompanied with his or her class teachers report detailing what the teacher thought was the problem with the child. Pierangelo (1998) says that the assessment process should involve the assessors observing a child in his or her

current placement which implies the involvement of the regular class teacher in the assessment process. This requirement of assessment that would have given the assessment personnel a starting point in assessment with some background of the child's current level of performance according to his or her current teacher was omitted at Nyeri Central EARC.

At the start of the assessment sessions the researcher observed that the parents who brought children for assessment did not have appointments nor did they carry regular class teachers written reports about the children who were to be assessed. Three out of the five parents carried brief notes from their regular school heads requesting for assessment of their children, while two of the parents did not have the introductory notes. During the assessment sessions, the assessment teacher filled the questionnaire (appendix x) from the information given by the parent accompanying the child. After filling the questionnaire and writing summary notes, the assessment teacher discussed the findings with the *parent and then filled the referral form (appendix xi) which the parent carried* for presentation to where the child was referred to for placement or treatment.

No report was written by the assessment teacher to accompany the referral as the researcher had observed at KISE during the piloting stage. Bearing in mind the fact that children who were brought for assessment did not bring along any reports from their schools from which the assessment teacher could form the basis of his assessment, the least the assessment teacher could have done was to make an appointment to visit the child's teacher to ascertain the child's

present level of functioning compared to the prevailing environmental, social and curriculum settings.

By and large, the child's role in the assessment process was found to be passive in that the child was hardly given any tasks to carry out by the assessor during the assessment session. Where the child was involved, the assessor gave undocumented verbal instructions whose feedback were not recorded. Because of this, the researcher found it difficult to establish the child's performance in assessment. Bala (2004) says that one session is not enough for a placement decision to be made as other professionals input may be needed which may involve consultation with the child's current teachers. This is further supported by the Council for Exceptional Children of 1977 (Ndurumo, 1993) which stipulated that one result should never be the basis of determining placement.

Alternatively, the assessment teacher could have given each one of the parents an appointment to bring about the regular class teacher's report. This study found out that the assessor did not refer the children they assessed to any other professional, which meant that a team approach to assessment and placement of children suspected of having mental retardation was not practiced at Nyeri Central EARC. Ndurumo (1993) cites the Council for Exceptional Children, of 1977 in the USA which stated that a multidisciplinary team testing is intended to yield multi-factored and multi-sourced information in order to provide a comprehensive picture of the child from the perspectives of the school, home, and the community. The rationale for the use of a team is that for a long time,

children were assessed only once and by a single individual using a single test. If the test result was wrong, children were misdiagnosed and mislabeled and remained in classrooms and institutions they should not have been in, in the first place. The consequence was a bleak future for the children as they were unable to make satisfactory progress either in school or in the society. The stigma associated with the labels also predisposed children to develop negative self- concepts.

According to Cline (1992), the Council for Exceptional Children (1977) states that, a multidisciplinary team should at best consist of; a parent or a guardian of the child, a certified or approved teacher who has recently or currently handling the child, an administrator of the local school department, and a certified or board licensed psychologist. Depending on the child's needs, other specialists may be included such as a registered nurse, and a social worker or a rehabilitation counselor. The assessment team should converse as well as interview the child. Save for the assessment personnel and the parent accompanying the child for assessment, none of the persons mentioned above were involved in assessment at the Nyeri Central EARC.

This study established that there were wrongly placed children in the two special schools going by the fact that in each special school there were some children who attended regular primary schools for classes and were in the special schools for boarding purposes only (table 4.1). The researcher visited a regular school where some of the children were integrated and found them

working with their classmates in different classes. The head teachers' also claimed that children with autism were also placed in the schools for children with MR further proving that wrong placement existed. To control the situation and ensure that wrong placement is avoided, referrals for assessment needed to be accompanied with detailed child's current performance. After assessment when placement is done, the assessment teachers should have written a comprehensive report on the outcomes of the assessment and recommended intervention strategies. The use of a multidisciplinary team approach in assessment is meant to source more and diverse information before making a placement decision. The use of standardized assessment instruments is meant to facilitate objectivity in the assessment process.

## **5.2 Implications of the Findings**

The major findings of this study such as the lack of a team of professionals approach to assessment, inadequacy of assessment tools and materials, and incomplete assessment which did not adequately cover all the aspects of mental retardation led the researcher to conclude that the assessment and placement process at the EARC could sometimes be undependable. Thus it was possible that the EARC could make wrong diagnosis and subsequently result in inappropriate placement.

This study agrees with Bala (2004) that no professional can effectively play the role of another, since the interest in assessment is to know how the child functions in different situations. The use of a multidisciplinary team approach

in assessment means that each professional involved in the evaluation of a child suspected of having SNE must have a session with the child and later at a round table conference report their findings and impressions before a placement decision is made (AAMD, 1992).

The assessment tools and materials inadequacy at Nyeri Central EARC suggested that the results obtained by the assessment teacher were not entirely reliable in determining the presence of mental retardation and the subsequent placement to a special school for children with mental retardation. The lack of relevant assessment tools and materials limited the involvement of the child in the assessment process and at the same time limited the number of tests a child could be subjected to.

Cline (1992) says that a child must be involved in the assessment process. The rationale for involving a child in the assessment process is that a child can contribute valuable information, own ideas and attitudes that can lead the assessment process to effectively diagnose the child's problem and contribute immensely to the intervention strategy to be adopted for the child. A child's involvement must be preceded by giving due consideration to his/her age, ability, and experience. The assessment personnel would then come up with a specific child report or a response sheet or procedure to guide the child participation. The child's participation must be determined by his or her maturity and level of functioning. This can only be achieved through the use of

standardized tools which must address intellectual, cognitive, social and emotional problems (Garguilo, 2006).

Moreover, a battery of tools must be administered to get a good overall picture in intellectual ability, development level and social competence of a child because the results of one assessment test should not form the basis for decision making on a child (Bala, 2004). Considering the noted inadequacies of the tools and materials in use at Nyeri Central EARC, it may well be concluded that the EARC might have come up with wrong diagnosis and subsequently wrong placement of children suspected of having mental retardation.

The assessment process which took one session only implied a lack of diligence in assessing the child from more than one perspective. There was lack of contribution from other specialists in the actual assessment and the making of placement decisions. Having the assessment teacher start assessment without the guidance of a regular teacher's report in the case of the four school age children, made it doubtful that the assessor could comprehensively evaluate a child in just one session. The case of the child who was not attending school appeared to be even more demanding to the assessment teacher considering the fact that there were no class teachers who could be consulted and the assessment teacher could only rely on the child's parent to give information about the child which would by all means be one sided. When a parent and a class teacher give information about a child, each one of them

contributes on diverse aspects of the child's functioning in different social and environmental settings.

For the school age children, it was necessary for the assessment teacher to make a visit to each one of the referring regular schools to consult with the regular teachers and observe a child in his/her current learning environment to get an idea of that child's predicament. This would have given the assessor a more comprehensive and multi-sourced information that would have given better guidance to the decision making process in assessment and placement of a child with mental retardation. Pierangelo (1998) argues that visiting the child's current learning environment is a fundamental step towards establishing and possibly explaining a child's unsatisfactory performance. This meant that the assessor may have had to visit the regular class where the child attended to talk to the regular teachers and establish the child's weaknesses and strengths before deciding on the best placement. Gallagher (1976) as quoted in Reynolds (1983) says that academic non performance could be the result of poor teaching methods and unsuitable curriculum and for this matter assessment could be used as an exclusionary process rather than a remedial one.

For the child who was not attending school, the assessment teacher would have been required to seek the input of the medical personnel who had referred the child for assessment to get their impressions about the child's problem. By consulting the medical personnel, the assessment teacher would have been able to gather from the medical personnel whether the child suspected of mental

retardation suffered from any associated disorders such as epilepsy and whether the child was under pharmacological intervention. The input of the medical personnel in this case would undoubtedly have made a positive contribution to the assessment and plotting an intervention strategy for the child.

Without a comprehensive evaluation, the assessment process was bound to come up with an unsatisfactory diagnosis which could very well lead to wrong placement. If the EARC made wrong placement as a result of a misdiagnosis resulting from wrong referral from the regular school, the EARC would only have been confirming the fears expressed by Gallagher (1976) as quoted in Reynolds (1983) that assessment could be used as an exclusionary process to get rid of academically non performing children from the mainstream education, and that regular schools and the EARC were unable to distinguish between low achieving and mildly handicapped children (Ysseldyke, 1987).

According to Hobbs (1975) as quoted in Ndurumo (1993), appropriate placement is a requirement for exceptional children. Therefore assessment must be careful and comprehensive. Those children who are in special schools and are thought to have been wrongly placed must undergo another assessment. Wrong placement could result in legal action being taken against the assessor as Ndurumo (1993) cites a suit between the Pennsylvania Association for Retarded Children and the Board of Education, where the court ruled that children who were misdiagnosed needed to be re-evaluated.

### **5.3 Conclusion**

Looking critically at the findings of this study, a good effort was made by the EARC to assess and make appropriate placement of children suspected of having mental retardation. The assessment personnel had the necessary training as SNE teachers, which help them to effect successful assessment. The assessment center however lacked in the crucial aspects of assessment ranging from the lack of some basic assessment tools and materials to the lack of a multidisciplinary team approach in assessment and placement of children suspected of having mental retardation.

Nyeri Central EARC needs to meet the requirements of an effectively functioning EARC to avoid the possibility of making wrong placement in future. Any test or tool used in assessment is supposed to have instructions detailing how it is used, how long it is supposed to take and the scoring procedures to determine pass or failure (Klein, 1979 in Ndurumo, 1993). The background information questionnaire which was the only assessment tool in use at Nyeri Central EARC (appendix x) did not have any one of these attributes, and therefore did not qualify as an effective assessment tool according to this study.

Observations made on the assessment process also suggested the possibility of wrong placement decisions being made due to the fact that a multidisciplinary team approach to assessment and placement was not in effect at Nyeri Central EARC. The study established that eleven children or 6.7% of the children in

the two special schools actually attended the neighboring regular schools (table 4.1). This proved that there was wrong placement emanating from the EARC because according to AAMD (1992), children with mild mental retardation should be placed in regular schools and not in special schools. Therefore the study concluded that any child, who was placed in the special schools but attended a regular school for classes, must have been having mild mental retardation or no mental retardation at all and was therefore wrongly placed.

According to Perry (1974) there can overlapping characteristics between mild mental retardation and learning difficulties which may suggest that children with learning difficulties may have been labeled as having mental retardation and placed in the special schools for children with mental retardation. This position is supported by Ysseldyke (1987) who described referral as being inconsistent, arbitrary and problematic as well as frequently being unable to distinguish between low achieving and mildly handicapped students.

#### **5.4 Recommendations**

Effective early identification and intervention strategies need to be based on multidisciplinary teams of professionals input, accurate assessment of the special needs using appropriate tools and materials, and a clear referral system. This study came up with a number of measures that if implemented with care, would result in greatly improved and ultimately effective assessment and placement process as far as children suspected of having mental retardation are concerned.

The initial measure to be undertaken by Nyeri Central EARC towards improving its services and becoming effective in its work should be to acquire the necessary assessment tools and materials which were found to be missing at the EARC during this study. The assessment tools that need to be acquired include the school readiness test, the screening test for children of six months to six years of age and a skills assessment sheet to check out adaptive behavior skills. In addition, Nyeri Central EARC's assortment of materials that are required to facilitate assessment was found to be scanty so there is need to acquire more of these materials for the EARC.

Designing or adapting a tool that will comprehensively test all aspects that define mental retardation should be done. Cognitive, social and behavioral aspects that define mental retardation should be tested using tools that have directions on their administration, timing and scoring procedures clearly stated. A test must indicate the criteria for passing or failing and the implication of passing or failing to child's placement.

Revising the background information questionnaire which is the main assessment tool currently in use at Nyeri Central EARC to effectively cover all the aspects related to adaptive behaviors is another way of improving the assessment and placement work of the EARC. This study suggests that items related to and relevant to the various sections of the questionnaire should be developed to cater for; academic work difficulties, motor difficulties, vision and hearing difficulties as these sections appear in the questionnaire. A section

on communication and emotional difficulties should also be considered for inclusion.

Before the assessment teachers embark on child evaluation, they must demand a class teachers report on the child's functioning from the referring school. During assessment and as part of the assessment, the assessment personnel must visit a child's current teachers to consult and observe the child's present functioning levels in both academic work and adaptive behaviors. A session with the child's current teachers should give the assessor enough information about the child's performance in and outside the class in carrying out different tasks as well as interactions with the other children and the environment.

Referral for admission should be comprehensive and showing assessment results to justify the placement sought. The assessment personnel should go a step further and write a comprehensive assessment report detailing the referred child's strengths and weaknesses which should accompany the referral. The assessment report should give suggestions about the kind of intervention strategies that can be adopted to benefit the child once placement has been effected. Where a referred child does not qualify for placement in an SNE program, the assessment teacher should write a detailed report for the child to take back to the regular school explaining why the child should remain in the regular class, and include the possible measures that will help the regular teachers be able to deal with the child's difficulties. The assessors can go further and suggest a regimen for behavior modification focusing on the child's performance in and out of class or school.

The assessment personnel should restructure the information gathering exercise so that they can consult other professionals before arriving at a placement decision. Input from other specialists, especially a psychologist, a social worker, a medical worker or even a regular school class teacher can show how the child relates with others especially parents, siblings and friends or class mates. A medical officer's examination should be able to establish whether a child suspected of mental retardation has any additional problems and advise the EARC personnel accordingly. Therefore, more than one session is needed for the assessor to gather as much data as practically possible on the child's performance in and out of school which can be put into consideration when placement and intervention plans are made.

This study realized that assessment is such a dynamic field so the assessment personnel should endeavor to be up to date with the most modern practices in assessment. This calls for the training of assessment teachers, parents and regular class teachers so that they can effectively identify suspected cases of mental retardation. On this count, workshops should be frequently organized for the assessment personnel, regular class teachers and parents on regular basis to help them keep up to date on identification and intervention measures that they can effect individually or as teams.

### **5.5 Suggestions for Further Research**

This study was carried out in one EARC only and going by the year 2003 Task Force Report Kenya had 72 EARCs. Many more districts have been created in

Kenya since then which in effect means more EARCs may have been established. Therefore this study suggests that a similar study be done in another EARC located in another province to find out how it is equipped in terms of assessment tools and materials and how they are used in assessment and placement of children suspected of having mental.

The research to be done should focus on the constraints associated with establishing a multidisciplinary team approach in assessment and placement of children suspected of having mental retardation. The role played by the regular school and teachers in assessment work should be emphasized on bearing in mind that the decision to refer a child for assessment usually emanates from them if not from the parent and they should therefore have a lot to contribute to assessment.

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**APPENDIX I****INTERVIEW GUIDE FOR THE HEAD TEACHERS.**

- (1) Are children referred from the EARC for admission to your school?
- (2) Do you admit children without referrals from the EARC to your school?
- (3) Do your teachers complain about pupils who are wrongly placed?
- (4) If the answer to question three above is yes, how do the teachers determine that the child is wrongly placed?
- (5) What do you do incase you determine that a child is in the wrong placement at your school?
- (6) Do you have any of your children attending the neighboring regular school for classes?
- (7) If answer to question six above is yes, give the number of children.

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**APPENDIX II****INTERVIEW GUIDE FOR THE ASSESSMENT PERSONNEL.**

1. Are you trained in SNE and assessment?
2. If the answer to question one above is yes, what are your professional qualifications?
3. How are children referred to you for assessment?
4. Does the EARC have adequate and the relevant assessment materials?
5. Do you use a multidisciplinary team approach in assessment and placement?
6. Who makes the placement decision?
7. Do you make follow-up evaluation on the children after placement?
8. What do you think can be done to make assessment more effective?

### APPENDIX III

#### INTERVIEW GUIDE FOR PARENTS/GUARDIANS.

1. Why is your child referred to the assessment center?
2. Did you agree with the reasons given for your child's referral?
3. During the assessment session, were you told what your child needs?
4. How do you rate the assessment services offered?

(Please check)

Excellent	Good	Average	Below Average	Poor
-----------	------	---------	------------------	------

RECEIVED BY ATTORNEY  
 SUJANNA MIAMI

**APPENDIX IV****ASSESSMENT PROCESS OBSERVATION CHECKLIST.**

1. The lay out of the assessment room and its furnishing.
2. Assessment tools and materials available.
3. Language used by the assessor to address his/her clients.
4. Creating a rapport by the assessor before embarking on assessment
5. Sitting arrangement.
6. How long did the assessment session last?
7. How many sessions are involved in assessing one child?
8. What role does the parent play in the assessment process?
9. Are there any documents accompanying the child (medical report, regular school head teacher's letter)?

**APPENDIX V****CHECKLIST FOR MULTIDISCIPLINARY TEAM CONFERENCE.**

1. Who are the professionals present?
2. How are different assessment reports given?
3. What is the decision making procedure?

**APPENDIX VI****EXAMINATION OF THE REFERRAL FOR ASSESSMENT**

1. Reasons for referral
2. Present level of functioning

(a) Academic \_\_\_\_\_

Math

Reading

(b) Adaptive behavior areas \_\_\_\_\_

Communication

Socialization

Self care

Self direction

Home living

Community use

3. Who made the referral?

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**APPENDIX VII****EXAMINATION OF THE REFERRAL FOR ADMISSION TO THE  
SPECIAL SCHOOL.**

1. Reasons for referral.
2. What are the evaluation results?
3. Who made the placement decision?

## APPENDIX VIII

### EXAMINATION OF THE ASSESSMENT TOOLS CHECKLIST

1. The child's class level at the time of assessment.
  
2. Problems in math-
  - 
  -
  
3. Problems in language;
  - (a) Reading -----
  - (b) spelling-----
  - (c) writing-----
  
4. Problems with adaptive behaviors
  - a) Daily living skills (e.g. personal, domestic, community).
  - b) Socialization (e.g. interpersonal relationships, play and leisure).
  - c) Motor skills (gross, fine).
  
5. Names and sources of the tool(s) in used to assess the child
  - 
  - 
  -
  
6. Adaptations of the tools for local use.
  
7. Instructions for use and scoring.
  
8. Actual number of tests given to the child.

**APPENDIX IX****ASSESSMENT ROOM OBSERVATION GUIDE**

1. Is the assessment room adequately furnished with?

Tables

Chairs

Shelves

Drawers

2. Are the following equipment/materials available?

Wheelchair

Dressing up clothes

Baby carriage

Strings and beads

Posting boxes

Basic feeding equipment (e.g. a spoon)

Basic cleaning equipment (e.g. a basin)

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**APPENDIX X**

**INSPECTORATE SPECIAL EDUCATION UNIT**

**EDUCATIONAL ASSESSMENT AND RESOURCE SERVICES**

**QUESTIONNAIRE FOR OBTAINING BACKGROUND INFORMATION**

NAME OF CHILD \_\_\_\_\_ NO \_\_\_\_\_

Name the Child is called at Home \_\_\_\_\_

Sex \_\_\_\_\_ Age \_\_\_\_\_ Date of Birth \_\_\_\_\_

Father's Name \_\_\_\_\_ Father's Age \_\_\_\_\_

Father's Occupation \_\_\_\_\_ Permanent Address \_\_\_\_\_

Mother's Name \_\_\_\_\_ Age \_\_\_\_\_

Permanent Address \_\_\_\_\_

Child's Residential Address \_\_\_\_\_

Child's School and Address \_\_\_\_\_ Class/Form \_\_\_\_\_

District \_\_\_\_\_ Location \_\_\_\_\_

Sub-Location \_\_\_\_\_

Village \_\_\_\_\_

Name of Chief \_\_\_\_\_

Tribe \_\_\_\_\_ Nationality (if not Kenyan) \_\_\_\_\_

Language Spoken in Family \_\_\_\_\_ at School \_\_\_\_\_

Other Languages Known to Child \_\_\_\_\_

Child's position in family \_\_\_\_\_

Number of Children in family (still living) \_\_\_\_\_

\_\_\_\_\_

Number of Children in family (deceased) \_\_\_\_\_

At what age did child die? \_\_\_\_\_

What was the cause of death? \_\_\_\_\_

Is anyone in the family handicapped? \_\_\_\_\_

If yes, what kind of handicap? \_\_\_\_\_

\_\_\_\_\_

**HISTORY OF BIRTH AND PREGNANCY**

Was the child born at home or in health institution? \_\_\_\_\_

Was the birth of the child normal or not? \_\_\_\_\_

If it was complicated, give details \_\_\_\_\_

Has the mother had any previous or later miscarriages or abortions? \_\_\_\_\_

\_\_\_\_\_

Did the mother suffer from any bleeding, illness or receive any immunization during pregnancy? \_\_\_\_\_

If yes, give details \_\_\_\_\_

Was the child born premature? \_\_\_\_\_

If yes, how many weeks? \_\_\_\_\_

What was the birth weight? \_\_\_\_\_

Did the child cry immediately at birth? \_\_\_\_\_

### **HISTORY OF THE CHILD**

What is the problem with the child? \_\_\_\_\_

What were the symptoms? \_\_\_\_\_

Has the child suffered from any disease? \_\_\_\_\_

Did the child suffer from an accident? \_\_\_\_\_

Give details \_\_\_\_\_

Was the child vaccinated against whooping cough? \_\_\_\_\_

Polio 1, 2, and 3 \_\_\_\_\_ Tuberculosis \_\_\_\_\_

Tetanus \_\_\_\_\_ Measles \_\_\_\_\_

How old was the child when he/she could \_\_\_\_\_

Stand \_\_\_\_\_

Walk \_\_\_\_\_ say first word \_\_\_\_\_

How does the child express its needs? \_\_\_\_\_

Does the child attend school? \_\_\_\_\_

If yes, at what educational level? \_\_\_\_\_

What is the child's attitude towards parent, siblings, and other children? \_\_\_\_\_

For children four years and above, is the child toilet trained (day/night)? \_\_\_\_\_

Does the child play normally with other children? \_\_\_\_\_

## APPENDIX X

## INSPECTORATE SPECIAL EDUCATION UNIT EDUCATION ASSESSMENT AND RESOURCE SERVICES

### QUESTIONNAIRE FOR OBTAINING BACKGROUND INFORMATION

Name of child \_\_\_\_\_ No \_\_\_\_\_

Name child is called at home \_\_\_\_\_

Sex \_\_\_\_\_ age \_\_\_\_\_ date of birth \_\_\_\_\_

Father's name \_\_\_\_\_ father's age \_\_\_\_\_

Father's occupation \_\_\_\_\_ Permanent address \_\_\_\_\_

Mother's name \_\_\_\_\_ age \_\_\_\_\_

Permanent address \_\_\_\_\_

Child's residential address \_\_\_\_\_

Child's school and address \_\_\_\_\_ class/form \_\_\_\_\_

District \_\_\_\_\_ location \_\_\_\_\_

Sub – location \_\_\_\_\_

Village \_\_\_\_\_

Name of chief \_\_\_\_\_

Tribes \_\_\_\_\_ (nationality if not Kenyan) \_\_\_\_\_

Language spoken in family \_\_\_\_\_ at school \_\_\_\_\_

Other languages known to child \_\_\_\_\_

Child's position in family \_\_\_\_\_

Number of children in family (still living) \_\_\_\_\_

Number of children in family (deceased) \_\_\_\_\_

at what age did child die? \_\_\_\_\_

What was the cause of death? \_\_\_\_\_

Is anyone in the family handicapped \_\_\_\_\_

If yes, what kind of handicap \_\_\_\_\_

### HISTORY OF BIRTH AND PREGNANCY

Was the child born at home or in health institution \_\_\_\_\_

Was the birth of the child normal or not \_\_\_\_\_

If it was complicated, give details \_\_\_\_\_

Has the mother had any previous or later miscarriages or abortions. \_\_\_\_\_

Did the mother suffer from any bleeding any bleeding; illness or receive any immunization during pregnancy \_\_\_\_\_

If yes, give details \_\_\_\_\_

Was the child born premature \_\_\_\_\_

If yes, how many weeks \_\_\_\_\_

What was the birth weight \_\_\_\_\_

Did the child cry immediately at birth \_\_\_\_\_

### **HISTORY OF THE CHILD**

What is the problem with the child \_\_\_\_\_

What were the symptoms \_\_\_\_\_

Has the child suffered from any disease \_\_\_\_\_

Did the child suffer from an accident \_\_\_\_\_

Give details \_\_\_\_\_

Was the child vaccinated against whooping cough \_\_\_\_\_

Polio 1,2,and 3 \_\_\_\_\_ tuberculosis \_\_\_\_\_

Tetanus \_\_\_\_\_ measles \_\_\_\_\_

How old was the child when he/she could

Stand \_\_\_\_\_

Walk \_\_\_\_\_ say first word \_\_\_\_\_

How does the child express its needs \_\_\_\_\_

Does the child attend school \_\_\_\_\_

If yes, at which educational level \_\_\_\_\_

What is the child's attitude towards parent, siblings, and other children \_\_\_\_\_

For children 4 years and above, is the child toilet trained

(day/night) \_\_\_\_\_

Does the child play normally with other children \_\_\_\_\_

Has the child had any serious illness/operation

If yes give details

\_\_\_\_\_

Is the child epileptic? If yes, describe the fits and the frequency of the fits

\_\_\_\_\_

\_\_\_\_\_

At what age did these fits start? \_\_\_\_\_

Previous or ongoing treatment \_\_\_\_\_

### **HAS THE CHILD VISUAL DIFFICULTIES**

If yeas, give details \_\_\_\_\_

\_\_\_\_\_

At what age did the parents first observe the vision problem \_\_\_\_\_

Previous or ongoing treatment \_\_\_\_\_

### **HAS THE CHILD HEARING DIFFICULTIES**

If yes, give details \_\_\_\_\_

At what age did the parents first observe the hearing problems \_\_\_\_\_

Previous or ongoing treatment \_\_\_\_\_

### **HAS THE CHILD MOTOR DIFFICULTIES**

If yes, give details \_\_\_\_\_

At what age did the parents first observe the motor problems \_\_\_\_\_

Previous or ongoing treatment \_\_\_\_\_

### **HAS THE CHILD SPEECH OR LANGUAGE DIFFICULTIES**

If yes, give details \_\_\_\_\_

At what age did the parents first observe the speech problems \_\_\_\_\_

Previous or ongoing training \_\_\_\_\_

### **HAS THE CHILD READING OR MATHS DIFFICULTIES**

If yes, give details \_\_\_\_\_

At what age did the parents first observe the reading and maths difficulties/problems \_\_\_\_\_

\_\_\_\_\_

Previous or ongoing training \_\_\_\_\_



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APPENDIX XI

REFERRAL FORM

MINISTRY OF EDUCATION

CHIEF INSPECTOR OF SCHOOLS  
INSPECTORATE  
PO BOX 30426  
NAIROBI

EDUCATIONAL ASSESSMENT AND RESOURCE SERVICES  
EARS PO BOX 39733 TEL: 340957 NAIROBI

REFERRAL FORM

TO \_\_\_\_\_

ASSESSMENT CENTRE \_\_\_\_\_ PROVINCE \_\_\_\_\_ DISTRICT \_\_\_\_\_

CHILD'S NAME \_\_\_\_\_ NO \_\_\_\_\_

SEX \_\_\_\_\_ DATE OF BIRTH \_\_\_\_\_ AGE \_\_\_\_\_

SCHOOL \_\_\_\_\_ PO BOX \_\_\_\_\_

FATHER'S NAME \_\_\_\_\_

PERMANENT ADDRESS \_\_\_\_\_

MOTHER'S NAME \_\_\_\_\_

PERMANENT ADDRESS \_\_\_\_\_

CHILD'S RESIDENTIAL ADDRESS \_\_\_\_\_

REFERRED FOR ASSESSMENT BY \_\_\_\_\_

TESTS USED \_\_\_\_\_

IMPRESSION/OBSERVATION \_\_\_\_\_

MEDICAL STATE OF THE CHILD \_\_\_\_\_

We would very much like you to see the above mentioned child for:

---

After your examination/treatment would you please send any relevant information to: \_\_\_\_\_

Thank you for your help, if there are any further questions please contact the centre.

Name of Assessor \_\_\_\_\_

Signature \_\_\_\_\_

## APPENDIX XII

## SCHOOL READINESS – TEST

	YES	NOT SURE	NO
1. <u>Visual Discrimination</u>			
a) Shapes - matching			
b) Colour – sorting of objects			
c) Sizes – arrangement of familiar objects by sizes			
d) Missing parts – presentation of pictorial cards showing various features/parts missing			
e) Spatial Perception using picture cards			
2. <u>Auditory Discrimination</u>			
a) Sound and noises that are familiar			
b) Word pairs			
3. <u>Visual Memory</u>			
a) Finding hidden objects			
b) Picture recall			
4. <u>Auditory Memory</u>			
a) Child repeats sequences of sounds as made by the teacher			
b) Child repeats sequences of words/numbers as said by the teacher after being given clear instructions			
c) Sentence recall			
5. <u>Comprehension</u>			
a) Simple command using familiar objects			
b) Simple commands using simple instructions			
c) Use of familiar items			
d) Have/not true – absurdities			
e) Simple story			

OBSERVATIONS:

	<b>SIGHT</b>	<b>MASTERED</b>	<b>ATTEMPTED</b>	<b>NOT MASTERED</b>
6 months – 3 years	1. Follows light (flashlights) with eyes and turns head			
	2. Child's pupils react when Light is put on and switched off.			
	3. Grabs at red tassel			
3 years and over	4. Picks up coloured beads, placed in front of him/her			
	5. Picks up transparent beads, placed in front of him/her			
	6. Vision screening test (distance)			
	<b>E. TEST</b>			

**N.B.** If a child of 3 years or over cannot manage any of the items 4 – 6 you should try items 1 – 3 and record the results.

	HEARING	MASTERED	ATTEMPTED	NOT MASTERED
6 months – 3 years	1. Turns head towards sound			
	2. Bell/rattle or cup/ glass Test			
3 years and over	3. Audiometer test (attach curve)			
	4. Bell/rattle or cup/ Glass test			

KEMENTERIAN KESIHATAN  
 MALAYSIA  
 DEPARTMENT OF HEALTH  
 MALAYSIA

		LANGUAGE DEVELOPMENT	MASTERED	ATTEMPTED	NOT MASTERED
6 months	6 months	1. Babbling developed			
		2. Imitates sounds			
		3. Reacts to own name			
		4. Says a few words			
		5. Understands some simple commands			
1 – 2 years	1½ years	6. Vocabulary of more than three words			
		7. Much babbling			
		8. Understanding is progressing rapidly			
2 – 3 years	2 years	9. Vocabulary – uses items from Child's daily life (5 objects)			
		10. Uses two word sentences			
	2½ years	11. Tells about own experiences			
		12. No babbling at all			
3- 4 years		13. Language understandable to Someone unfamiliar with child			
		14. Uses 3 – 5 word sentences			
		15. Describe simple events in some detail			
4 – 5 years		16. Language well established. Deviations from adult norm Tend to be more in style than In grammar			

## MOTOR DEVELOPMENT

		MASTERED	ATTEMPTED	NOT MASTERED
6 months	1. Sitting Bead forwards & use hands for support			
8 months	2. Stand & hold the table (straight)			
10 months	3. Pick the beads 4. sit by himself			
1 year	Walk (held by hand)			
1½ years	Walk alone Held something & release with ease			
2 years	Runs but falls easily Quickly alternates between standing & sitting Jumps with two feet Stands on one fat for two seconds. Builds block tower			
3 - 4 years	Tip-toes for five metres Runs normally Can do up buttons Stands on one leg Rises from lying to standing Catches the ball using hands & arms Climbs a small tree/something similar Hops on one foot Reproduces an outline (use pencil)			

	<b>SOCIAL AND EMOTIONAL DEVELOPMENT</b>	<b>MASTERED</b>	<b>ATTENDED</b>	<b>NOT MASTERED</b>
6 months – 1 years	1. Smiles			
	2. Shows feelings when spoken to			
1 – 2 years	3. Shows appropriate response to mother's facial expression			
	4. Follows moving people with eyes			
2 – 3 years	5. Recognizes differences between people			
	6. Responds to words with: appropriate actions			
3 – 4 years	7. Likes playing with other children			
	8. Sleeps well without waking			
4 – 5 years	9. Eats normally without much persuasion			
	10. Enjoys role playing			
	11. Shows normal fear			
5 – 6 years	12. Asks for help when having problems			
	13. Imitates adult behaviour			

## APPENDIX XIV

MATERIALS FOR AN EARC:

- Walker: a wooden or metal walking frame with wheels
- examples of adapted chair, toilet
- pencil grip
- adapted spoon
  
- coloured blocks of different sizes
- peg boards
- different sized wooden boxes that can be stacked inside of each other
- threading frame: a wooden board with holes and thick string to practice threading
- tactile board
- geometric shapes, wooden
- wooden carved animals
  
- sound shakers
- bells
- bean bags
  
- alphabet squares: wooden, each square having one letter of the alphabet painted on it preferably raised
- number squares; wooden, with each square having one number painted on it, preferably raised.
  
- Counting abacus
  
- jigsaw puzzles, such as body chart
- dollies
- common items found in the house: example: cup, bowl, spoon
- pictures on wood, or on card, laminated) of common items found in the house:
  
- books with pictures
- books with words and pictures
- books with words only
  
- writing and drawing materials:
  - o Paper, pencils, coloured pencils, pens markers

## APPENDIX XV

**MINISTRY OF EDUCATION**

Telegrams: "Schooling", Nyeri  
Telephone: (061) 2030518, 2030540  
Fax: 0612030535  
When replying please quote



District Education Office  
P O Box 208  
NYERI.

Ref: GEN/RIS/42/VOL.II/53

Date: 18<sup>th</sup> May 2009

The Heads of Special Schools  
NYERI SOUTH

**RE: RESEARCH AUTHORIZATION**  
**MWIHUNGI HUPHREY KIHORO**

---

The above has authority to carry out research in Special Schools in Nyeri South District for a period ending 30<sup>th</sup> May 2009.

Please accord him the necessary assistance.

A handwritten signature in black ink, appearing to read 'Muthee J. M.', written over a horizontal line.

**MUTHEE J. M.**  
**For: DISTRICT EDUCATION OFFICER**  
**NYERI DISTRICT**

REPUBLIC OF KENYA



# NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telegrams: "SCIENCETECH", Nairobi  
 Telephone: 254-020-241349, 2213102  
 254-020-310571, 2213123  
 Fax: 254-020-2213215, 318245, 318249  
 When replying please quote

P.O. Box 30623-00100  
 NAIROBI-KENYA  
 Website: [www.ncst.go.ke](http://www.ncst.go.ke)

Our Ref:

Date:

NCST/5/002/R/285/4

4<sup>th</sup> May 2009

Mr. Mwihungi Humphrey Kihoro  
 Kenyatta University  
 P.O. Box 43844  
 NAIROBI

## RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *Effectiveness of Assessment and Placement of Children with Mental Retardation to Special Schools at the Nyeri South Assessment Centre*

I am pleased to inform you that you have been authorized to carry out research in Special Schools in Nyeri South District for a period ending 30<sup>th</sup> May 2009.

You are advised to report to the District Commissioner and the District Education Office Nyeri South before embarking on your research.

On completion of your research, you are expected to submit two copies of your research report to this office.

PROF. S. A. ABDULRAZAK Ph.D, MBS  
 SECRETARY

Copy to:

The District Commissioner  
 Nyeri South District

The District Education Officer