INCLUSIVE EDUCATION FOR THE GIFTED AND TALENTED LEARNERS: THE CASE OF MWANGAZA PRIMARY SCHOOL IN KENYA.

BY
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DECLARATION

This thesis is my original work and has not been presented for examination in any other university.

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ABSTRACT

The main objective of this study was to investigate into the teaching and learning of the gifted and talented learners in Kenya primary schools. The emphasis was on how gifted learners are taught in actual classroom situation and the problems teachers and learners encounter, in the teaching-learning process.

The study was conducted in Mwangaza Primary School, Nairobi Province, Kenya. One school was selected and one class out of five in which the gifted learners were selected for the study. Three learners were identified out of eighty.

The study adopted ethnographic research design. Data was collected through questionnaires, interview schedules and classroom observations. Research questions were formulated from specific objectives of the study. Data was organized according to research questions they answered.

The study found out that teachers were aware of the gifted and talented learners in their schools. Teachers said that gifted and talented learners are challenging and that to keep up their pace is difficult especially with the large numbers they handle. Teachers gave gifted and talented learners responsibilities as they helped with the average and slow learners. Gifted and talented learners expressed boredom about the work they do in school.

It was concluded that inclusive education for the gifted and talented learners has not been recognized and taken care of in the Mwangaza Primary school. The study recommends that diverse teaching-learning strategies, resources and evaluation should be offered and well utilized in the teaching and learning of the gifted and talented learners.
CHAPTER ONE

1.0 INTRODUCTION TO THE STUDY

1.1 Introduction
The chapter introduces the problem, which has been investigated. It has the background to the problem, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, limitations, assumptions, theoretical framework, and definition of significant terms.

1.2 Background to the Problem
Inclusive education means education that is nondiscriminatory in terms of disability, culture, gender, or other aspects of learners or staff that are considered significant by a society. It involves all learners in a community, with no exceptions, irrespective of their intellectual, physical, sensory or other differences. They have equal rights to access the culturally valued curriculum of their society as full-time learners. Ballard (1997) says inclusion emphasizes diversity over assimilation, striving to avoid the colonization on minority experiences by dominant members modes of thought and actions.

According to UNESCO (1995), inclusive orientation is the most effective means of combating discriminatory attitudes, creating welcoming communities, building on an inclusive society and achieving education for all. Moreover, it provides an effective education to the majority of children, improves the efficiency, and, ultimately, the cost effectiveness of the entire education system.
According to Barton (1997), inclusive education is about responding to diversity. It is about listening to unfamiliar voices, being open, empowering all members, and about celebrating difference in dignified ways. From this perspective the goal is not to leave anyone out of the mainstream.

Inclusive education experience is about learning to live with one another. It is about how, where, and why and with what consequences we educate all pupils and involves a serious commitment to the task of identifying, challenging and contributing to the removal of injustice in education.

The term gifted is often used to refer to the heterogeneous spectrum of students with exceptional abilities of high levels of intelligence. Other terms such as talented and creative are used to differentiate sub-groups of gifted people. According to U.S. Department of Education (1993), the gifted are children and youth with outstanding talents who perform or show potential for performing at remarkably high levels of accomplishment when compared with others of their age, experience, or environment. These children and youth exhibit high performance capability in intellectual, creative, and/or artistic areas, possess an unusual leadership capacity, or excel in specific academic fields. They require service or activities not ordinarily provided by schools. Outstanding talents are present in children and youth from all cultural groups, across all economic strata, and in all areas of human endeavor. The Republic of Kenya (1999) gave three compelling reasons why gifted children need special education. These are:

- Effective education depends on matching the level and pace of instruction with the learners level and rate of achievement.
• Gifted learners advanced conceptualization level and rapid learning rate make most regular classroom instruction inappropriate to their education needs.

• Specialized education for the gifted provided instruction commensurate with their exceptional ability.

In general education settings, learners who are gifted or talented are sometimes subjected to conditions that indeed hinder the possibility for having their individual needs met. The U.S Department of Education (1993) has noted the following concerns related to educating gifted learners in general education settings:

• The general education curriculum does not challenge gifted learners.

• Most academically talented learners have already mastered up to one and half of the required curriculum offered to them in elementary school.

• Classroom teachers, do little to accommodate the different learning needs of gifted children.

• Learners talented in arts are offered few challenging opportunities.

Clinkenbeard (1991) alludes that when gifted learners are involved in cooperative learning they may end up doing all the work. This deny the slow learners and average learners an opportunity to participate in the learning process.

Shaner (1991) states that when gifted learners finish assignments early, they are given more of the same type of work or assigned more of the same types of tasks at the outset. Gifted learners need complex work as compared to the average learners. Instructional materials in general education classrooms are
frequently limited in range and complexity. Clark (1996) alludes that advanced levels of critical thinking are not typically incorporated into lessons. In most cases gifted learners are used as co-teachers to help learners who need more assistance. Unfortunately, most general education teachers are not provided with the necessary understanding, skills and resources to deal appropriately with the gifted. In Kenya teachers trained in Kenyatta University, Kenya Institute of Special Education and Maseno University are not enough to handle the primary school population alone. This situation is exacerbated by the fact that teachers have to deal with a wide range of abilities and needs in their classrooms. The composition of the general education classroom in many of today's public schools requires a staggering array of accommodative knowledge and skills.

Some teachers feel uncomfortable working with students who have exceptional abilities. Shaner (1991) remarks that teachers who are working with gifted learners can be intimidated, paralyzed with a fear of not being able to keep up, or threatened by the learners' challenges to authority. Teachers are also concerned about being asked questions they are unprepared to answer or challenged on points they may not know well.

1.3 Statement of the problem

It has been observed that under the general settings, learners who are gifted or talented are sometimes subjected to conditions that indeed hinder the possibility of having their individual needs met. Republic of Kenya (1999) has stated 3 compelling reasons why gifted learners need special education. Also most general education teachers are not provided
with necessary understanding, skills and resources to deal appropriately with the gifted learners.

It has also been noted that outstanding talents are present in children and youth from all cultural groups, across all economic strata, and in all areas of human endeavor (US Department of Education 1993).

There is no known study which has identified gifted and talented learners in the teaching-learning situation in Kenya.

This study set out to identify the gifted and talented learners and investigate how teachers cope with the teaching-learning of the gifted and talented learners in Mwangaza primary school, Embakasi Division in Nairobi province, Kenya. The study investigated the problems that learners and their teacher encounter in the teaching-learning process. Bellack (1970) once observed, the classroom is the major arena of interaction between the teachers and the child. This was the core of this study because educational curriculum is implemented through specific methods and directly affects learners.

The study therefore is a description of what goes on in a typical classroom with the gifted and talented children. It was an attempt to explain why what goes on actually takes place and finally a prognosis of the possible impacts of what goes on in the teaching-learning of the gifted and talented. The study hence was out to explore a situation in Mwangaza Primary School.

1.4 Purpose of the study

The purpose of the study was to investigate the role played by teachers in helping the gifted and talented learners realize their potential. The study focuses on how and what gifted and talented learners are taught as compared to their age groups.
1.5 Specific objectives
The main objective of the study was to investigate the teaching-learning of the gifted and talented in Kenyan primary schools. Specifically the study sought to:

- Find out how teachers identify gifted and talented learners in Mwangaza primary school.
- Find out how well teachers are prepared for the teaching and learning of the gifted and talented learners.
- Find out the suitability of the content compared to the learners capacity.
- Find out the teaching-learning strategies teachers employ in the teaching of the gifted and talented learners.
- Find out learners perceptions of the teaching-learning strategies viz-a-viz their ability to learn.
- Find out how teachers and learners utilize the available resources in the teaching-learning process.
- Find out the suitability of the evaluation strategies adopted for the gifted and talented learners.
- To make recommendations for the education of the gifted learners.

1.6 Research Questions
To provide information that may improve the teaching-learning of the gifted and talented learners, the problem was investigated based on the following research questions.

- How are the gifted learners identified?
- How well are teachers prepared for the teaching-learning of the gifted and talented learners?
• What teaching-learning methods do teachers employ in handling the gifted and talented learners?

• What are the learner’s perception of the teaching-learning methods adopted viz their ability to learn?

• How suitable is the content taught to the gifted and talented learners?

• How suitable are the evaluation strategies adopted for the gifted and talented learners?

• How do teachers and learners utilize the available resources in the teaching and learning?

1.7 Significance of the study

The study was significant in that the data gathered should be of use to stakeholders particularly the Ministry of Education, Science and Technology in formulating policies for the education of the gifted and talented learners in Kenya.

Further, the study presents findings on curriculum experiences of the gifted and talented learners, which can be useful in selecting appropriate materials in the curriculum in order that their potential are realized. Gifted individuals realizing their potential means an improved human resource.

The study also serves as a springboard from which further research can be conducted in the area of the teaching-learning of the gifted and talented learners in Kenya.
1.8 Delimitations and Limitations of the Study
There are many factors that influence the teaching-learning of the gifted and talented learners. This study focused on the teaching-learning of the gifted and talented learners in primary schools.

The study focused on the teaching-learning strategies employed by the teacher, teaching-learning resources and the learners’ perception of teaching and learning in a typical classroom. It also focused on the structure and content of what the teachers teach. Evaluation strategies adopted were examined for their suitability with gifted learners. The study only dealt with teachers and learners of standard three, the rationale being that the former have only one teacher to teach them throughout. One school was used in the study and the results may not be generalized to the province.

1.9 Assumptions of the study
The assumption underlying the study was:

- Teachers are aware of the existence of the gifted children in their classes.

1.10 Theoretical Framework
This study was guided by Husen’s (1995) theory of meaningful learning which states that the teacher or instructional material (e.g. book, computer) plays an important role ensuring that the learner is engaged appropriately with instructional materials. The five characteristics of meaningful learning according to Husen (1995) are:

- Active – the learner must carry out various cognitive operations on the information being learned for it to be acquired in a meaningful way.
• Constructive – Each learner perceives and interprets information in a unique manner based on factors such as prior knowledge, interest, motivation and then elaborate this information by relating it to existing knowledge and other aspects learned.

• Cumulative – new knowledge or learning builds upon the individuals prior knowledge and mental models.

• Self-regulated – as learning progresses, the learner must make decisions about what to do next, for example, seek an answer to a question that comes to mind, look for similarities among various pieces of information. Effective learners also monitor the learning process by making periodic checks of how well the materials are understood.

• Goal oriented – meaningful learning is more likely to be successful if the learner has a general idea of the goal being pursued and hold appropriate expectations for achieving the desired understanding. This then calls for learner’s activity in the learning venture.

The study attempted to find out whether gifted and talented learners are actively involved and express their diverse areas of potentialities when learning. The study was guided by the theory of meaningful learning because for learners to achieve desired outcomes in realizing their potentials they must exhibit the five characteristics of meaningful learning.
Conceptual model of the study adopted from theoretical framework is shown in figure 1.1

Figure 1.1 A conceptual Model of the Study

Gifted and talented learners are active, constructive, goal oriented, self-regulated, which lead to cumulative knowledge and self actualization hence commitment to society.

1.11 Definition of Significant Terms

Acceleration - make something happen soon.

Achievement - attainment

Curriculum- all the selected, organized, evaluative, integrative and innovative educational experiences provided to the learners consciously or unconsciously under the school authority in order to achieve the designated learning outcomes (Malusu, 1997)
Enrichment - Refers to techniques that provide topics, skills development, materials or experiences that extend the depth of coverage beyond the typical curriculum.

Gifted and talented – are children or youth who consistently have outstanding high performance in specific areas of creativity, leadership, psychomotor ability, specific academic ability, general academic ability and visual and performing arts.

Inclusion – Is the organization of a school so that all students who would usually be assigned to it are educated with their age peers.

Individualized Educational Programme (IEP) is a teaching plan for a student with special educational needs usually drawn by the assessment team in collaboration with the teacher.

Intelligence – Power of understanding.

Mainstream – Is where the learners with special needs are included in general education classes to increase their social integration opportunities.

Potential – inherent capacity.

Self-actualization – reaching highest level of attainment.

Special education – a system of education where adopted or specialized curriculum intervention process of teaching through individualized educational programmes and special facilities are provided to assist exceptional children to perform to the level of their ability.

Underachievement – someone attaining less than his/her potential can elicit.
1.12 Organization of Thesis

This research report constitutes five chapters namely: Chapter One; Introduction, Chapter Two; Literature Review, Chapter Three; Methodology, Chapter Four; Data Presentation Analysis and Discussion and Chapter Five; Summary, conclusions and recommendations.
CHAPTER TWO

2.0 REVIEW OF RELATED LITERATURE

2.1 Introduction
In this chapter, literature related to the problem is reviewed under the following headings: definitions of the gifted and talented learners; prevalence and origin of giftedness; characteristics of students who are gifted; identification, assessment, and eligibility; realities of the general classroom; strategies for curriculum and instruction.

2.2 The gifted and Talented
Various scholars have put a number of definitions forward in an attempt to define who the gifted and talented children are. As early as 1935, Terman defined them as the 2% who score highest on a test of intelligence. Witty (1963) defined the gifted and talented as children whose performance is consistently remarkable in any potentially valuable area. Renzulli (1979) refers to the gifted and talented as the children equated with creative and productive accomplishments. An improvement on the above definitions is provided by the American Public Law 91-230 which states that:

*The gifted and talented children are those children identified by professionally qualified persons who by virtue of outstanding abilities are capable of high performance.*

Ndurumo (1993) stated that these children require differentiated education programmes and or services beyond those provided by regular school performance in order to realize their contribution to self and to society.
For the purpose of the study, the definition adopted is the one based on evidence of advance or accelerated development of brain function and which integrates definition by Clark (1997) that gifted is a biologically rooted concept, a label for a high level of intelligence that results from advanced and accelerated integration of sensing, emotions, cognition and intuition. Such advanced and accelerated functions can be expressed through abilities such as those involved in cognition, academic aptitudes, leadership, or the visual and performing arts.

Children and youth with outstanding talent perform or show the potentials for performing at remarkably high levels of accomplishments when compared with others of their age, experience, or environment. These children and youth exhibit high performance capability in intellectual, creative and/or artistic areas. The gifted also possess an unusual leadership capacity, or excel in specific academic fields. They require services or activities not ordinarily provided by schools. Outstanding talents are present in children and youth from all cultural groups, across all economic strata, and in all areas of human endeavor.

According to Renzulli (1979), one way to conceptualize giftedness is to consider the interaction of three interlocking clusters of traits as essential elements associated with outstanding accomplishment. The three clusters are as follows:

- High ability – including high intelligence
- High creativity – the ability to formulate new ideas to the solution of problems.
- High task commitment – a high level of motivation and the ability to see a project through to its completion.
These criteria are found in two types of people who are truly gifted and are, as noted by Tannebaum (1997), those who produce and those who perform. Gifted and talented individuals perform or show potential to perform at higher levels than average children.

2.3 Prevalence and Origins of Giftedness

The number of students who display exceptional abilities is uncertain. However, according to National Center for Educational Statistics (1989) figures of 3% to 5% are typically cited to reflect the extent of giftedness in the school population. Smith et al (1995) indicates that the critical issue is the distinction between the number of students who are identified as gifted and those who might be gifted in a classroom and not identified. Only certain types of gifted students may be served because of the methods used for identification. Another cautionary note is that such figures generally underestimate the number of gifted students who are ethnically or culturally
different, disabled, or female. These subgroups are underrepresented in programs for students with exceptional abilities.

Much professional discussion has focused on what contributes to giftedness in a person. Most researchers suggest that giftedness results from the interaction between biology and environment. Research has shown that behaviour is greatly affected by genetics. Although the notion is sometimes overemphasized, genetic factors do play a role in giftedness. Other biological factors, such as nutrition, also have an impact on an individual's development.

Smith et al (1995) says that the environment in which a child is raised also affects later performance and intellectual abilities. Homes in which there is much stimulation and opportunity to explore and interact with the environment, accompanied by high expectations, tend to produce children more likely to be successful scholastically and socially.

2.4 Characteristics of learners who are Gifted

Learners who are gifted demonstrate a wide range of specific aptitudes, abilities, and skills. Though they should not be overgeneralized or considered stereotypical, certain characteristics distinguish students who are gifted or talented.

Reis and Schack (1993) states that a notable characteristic that has important classroom implications is gifted student's expenditure of minimum effort while still earning high grades. Many gifted students are able to handle the general education curriculum with ease. But the long-term effect of being able
to excel without working hard may be a lack of the work habits needed for challenging programs at a later point in time.

A summary of a comprehensive list of characteristics developed by Clark (1997) about the gifted children is provided here below:

The cognitive function

- Extraordinary quantity of information, unusual retentiveness.
- Advanced comprehension
- Unusual varied interests and curiosity
- High level of language development
- High level of verbal ability
- Unusual capacity of processing information
- Accelerated pace of thought processes
- Flexible thought processes
- Comprehensive synthesis
- Early ability to delay closure
- Heightened capacity for seeing unusual and diverse relationships, integration of ideas, and disciplines.
- Ability to generate original ideas and solutions.
- Early ability to use and form conceptual frameworks.
- An evaluative approach towards oneself and others.
- Unusual intensity; persistence goal-directed behavior.

The affective function

- Large accumulation about emotions that have not been brought to awareness.
- Unusual sensitivity to the expectations and feelings of others.
• Keen sense of humor
• Heightened self-awareness, accompanied by feelings of being different.
• Idealism and a sense of justice, which appear at an early age.
• Early development of an inner locus of control and satisfaction
• Unusual emotional depth and intensity
• High expectation of self and others, often leading to high levels of frustrations with self, others, and situations.
• Strong need for consistency between abstract values and personal actions.
• Advanced levels of moral judgment
• Strongly motivated by self-actualization needs.
• Advanced cognitive and affective capacity for conceptualizing and solving societal problems.
• High Leadership ability.
• Solutions to societal needs

The physical/sensing function
• Unusual quantity of input from the environment through heightened sensory awareness.
• Unusual discrepancy between physical and intellectual development.
• Low tolerance for the lag between their standards and their athletic skills.
• Cartesian split – can include neglect of physical well-being and avoidance of physical activity.

The Intuitive Function
• Early involvement and concern for initiative knowing and metaphysical ideas and phenomena.
• Open to experiences in this area; will experiment with psychic and metaphysical phenomena.
• Creative approach in all areas of endeavor.
• Ability to predict; interest in future

These characteristics will help in understanding the teaching-learning methods, the content, evaluation strategies adopted and materials used in the teaching-learning of the gifted and talented learners.

An interesting phenomenon is the paradoxical negative effect of certain positive behaviour displayed by gifted students. Smith et al (1995) noted that gifted learners sincere, excited curiosity about a topic being covered in class can sometimes be interpreted as annoying or disruptive by a teacher or fellow learners. Their quick answers or certainty that they are right may be misconstrued as well. Such desirable behavior can be misperceived as problem behavior for students who are gifted.

2.5 Identification, Assessment, and Eligibility

General education teachers need to know about the assessment process used to confirm the existence of exceptional abilities. Teachers play a crucial role in the initial stages of the process of identification, for they are likely to be the first to recognize that a learner might be gifted, for this reason, teachers should provide opportunities across the range of ability areas for students to explore their interests and abilities. Gardner (1993) suggests that this may help students discover certain abilities that might otherwise be unnoticed.

Ndurumo (1993) states the following seven evaluation procedures to identify the gifted children:
• Evaluation by teachers
- Evaluation by peers and classmates
- Evaluation by parents and other important people
- Administration of intelligence tests
- Administration of achievement tests
- Self-evaluation

Smith et al (1995) came up with a helpful technique used in many school systems for example in U.S, Britain, South Africa to determine the performance capabilities of students called portfolio assessment. Portfolios contain a collection of student-generated products, reflecting the quality of a student’s work. They may also contain permanent products such as artwork, poetry, or video tapes of learner performance.

As Van Tassel-Baska, et al (1989) point out, learners who are culturally different and those who come from socially and economically disadvantaged backgrounds are typically overlooked in the process of service delivery in the educational set up. Also Smith et al (1995) alluded that students who are twice exceptional, that are gifted and who also have disabilities are difficult to identify. For instance, the problems that characterize a learning disability (e.g. problems in language-related areas) mask high levels of accomplishment in other areas such as drama, art, or music.

2.6 Realities of the General Classroom

In general education settings, learners who are gifted or talented are sometimes subject to conditions that indeed hinder the possibility for having their individual needs met. The U.S. Department of Education (1993) has noted the following concerns related to educating gifted students in general education settings at elementary level:-
• The general education curriculum does not challenge gifted students.
• Most academically talented students have already mastered up to one half of the required curriculum offered to them in elementary school.
• Classroom teachers do little to accommodate the different learning needs of gifted children.
• Students talented in arts are offered few challenging opportunities.
• Most specialized programs are available for only a few hours a week.

Other more specific practices that can be problematic for gifted students in the educational set up are:-

Clinkenbeard (1991) pointed out that when involved in group activities, (i.e. cooperative learning), gifted learners may end up doing all of the work. They are often subjected to more stringent grading criteria.

Shaner (1991) added that when gifted finish assignments early, they are given more of the same type of work or assigned more of the same type of tasks at the onset.

Clark (1997) said that vocabulary use in the average classroom is inappropriate for advanced learners. Advanced levels of critical thinking are not typically incorporated into lessons. Also instructional materials in general education classrooms are frequently limited in range and complexity.

Teachers tend to use lecture methods in teaching to cover curriculum content in good time for students to pass well in examinations. Gallagher (1997) said problem solving strategies are not used in classrooms. Problem solving strategies provide an excellent way of imparting knowledge to learners. It is said to be time consuming but its outcomes are long lasting.
Some teachers feel uncomfortable working with students who have exceptional abilities. Shaner (1991), remarks that teachers who are working with gifted students can be “intimidated” by him or her, paralyzed with a fear of not being able to keep up or threatened by the student’s challenges to authority”. Teachers are also concerned about being asked questions they are unprepared to answer or challenged on points they may not know well. These are reasonable fears; however, they can be minimized by using these opportunities as a way of increasing everyone’s knowledge— a teacher’s as well — and by understanding how to address gifted students needs within the general classroom setting.

2.7 Strategies for Curriculum and Instruction

Differentiated programming for students with exceptional abilities, wherever it occurs, must address individual needs and interests in the context of preparing the students for a world characterized by change and complexity. Reis (1989) suggested that we reassess how we look at content-based nature of most current curriculums to an orientation based on a realistic view of future education.

The literature on providing effective services for students with exceptional abilities consistently stresses the need for differentiated programming. This means that learning opportunities provided to these learners must differ according to a student’s needs and abilities. Differentiations includes the content of what students learn, the process used in the learning situation and the final products that students develop. Furthermore, as Lopez and Mackenzie (1993) noted the “Difference lies in the depth, scope, pace and self-directedness of the expectations”.

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The above reviewed literature indicates that gifted and talented learners are in schools. The teaching and learning of the gifted and talented students require some special attention in order to realize their potentials. Following these earlier works, the study will find out the extent to which services are rendered to gifted learners in Mwangaza Primary school.

2.8 Summary of the Chapter
The literature reviewed in this chapter highlights on who are gifted students, their prevalence, their characteristics, and their curriculum instructional strategies. However, the study intended to find out whether or not the gifted and talented learners are adequately provided with the necessary teaching-learning strategies, suitable content, and the right evaluation strategies in order to achieve their potential under the school curriculum in Kenya.
3.0 DESIGN AND METHODOLOGY

3.1 Introduction

In this chapter, an attempt is made to describe the research design, the study locale, the population, the sample and sampling procedures. The description of data collection instruments, the procedures for data collection and the plan for data analysis has also been presented.

3.2 Research Design

This was an ethnographic study. According to Wiersma (1995) ethnographic research is an inquiry process guided by experience in the research setting. Reality is viewed holistically and complex phenomena are not reduced to a few variables. By holistic is meant the idea of acquiring an all round view of the teaching-learning of the gifted and talented learners.

If we project this definition of ethnography into educational research, we can describe the ethnographic research as the process of providing holistic descriptions of educational systems, processes and phenomena within their specific contexts. Ethnographic research is conducted in a natural setting and the researcher observes what is happening as it occurs naturally.

Wiersma (1995) argues that within the past two or three decades, ethnographic research in the educational context has been receiving increased attention. Undoubtedly, this is partly due to increased acceptance of, and increased interest in qualitative research.

Wiersma further argues that there may be problems in education that can best be attacked, and possibly only can be attacked, through an ethnographic
research approach. In order to investigate the teaching-learning of the gifted and talented learners in the mainstream, therefore, this study collected holistic qualitative information from members of a group of learners and teacher about the teaching-learning of the gifted and talented learners in one school. Then an analysis of the information was made to illuminate on the factors affecting the teaching-learning of the gifted and talented learners in the mainstream.

According to Kotliar (1993), if the research study happens to be an exploratory one wherein the major emphasis is on discovery of ideas and insights, the research design most appropriate must be flexible enough to permit the consideration of many different aspects of a phenomenon. An ethnographic research design allows for such flexibility.

3.3 The Study Locale

The study was carried out in Mwangaza Primary school in Kayole Location, Embakasi Division of Nairobi province. Embakasi Division is in the east of Nairobi province. The Division is highly populated as compared to other Divisions in the province. The economic status of the people living in Kayole Location is very low. Singleton (1993) observes that the ideal setting for any study is one that is directly related to the researcher's interests. Having taught in the Division, the researcher has professional interest to do research in the area. At the same time, and most importantly there is no evident research that has been carried out on the education of the gifted and talented learners in Embakasi Division of Nairobi province. There was need, therefore, to carry
out research on the teaching-learning of the gifted and talented in the primary school in the Division.

The Division was also accessible and convenient to the researcher. Singleton (1993) further argues that the ideal setting for any study should be easily accessible to the researcher. This was important consideration given the limited time and finances at my disposal.

3.4 Description of the target population

This case study targeted a public primary school because it accommodates learners from all social and economic status both advantaged and disadvantaged.

The target population was the standard three learners in Mwangaza Primary school in Embakasi Division and their teacher.

3.5 The Sample and Sampling Procedures

The sample for the study consisted of one Public Primary School. Patton (1990) highlights that typically, qualitative inquiry focuses in depth on even a single case.

Embakasi Division has thirty-two public primary schools. The school purposively selected had three streams and only one class was used for study.

One teacher of standard three and 20 learners identified in the purposively selected public primary school was used in the study.

The standard three teacher was purposively selected for the study because of being directly involved with the teaching-learning of the gifted and talented
children in that class. The teacher was able to identify the gifted and talented learners through their excellent performance.

The standard three class was selected because they are taught by one teacher for a longer time, hence, accurate response from both the teacher and the learners who might have interacted for a considerable time.

Purposive sampling was used to select the one public primary school for the study. According to Peil (1995), in purposive sampling, sample elements are sometimes chosen because they fulfill certain criteria with which the research is concerned. The sample school had three streams, the class that participated in the research was purposively selected. Out of 80 learners in one stream in standard three, 20 were selected for the study. Gay (1987) observes that a descriptive study requires a minimum sample of 20%.

Patton (1990) says even a single case can provide information rich case for detailed study. Patton explains that information rich cases are those from which one can learn a lot about the purpose of the research.

3.6 Data Collection Instruments

Observations, Questionnaire and interview schedules were used to collect data.

According to Cohen (1976), classroom observation produces a broad description of the class teacher's practices and methods. Kothari and Pals (1993) note that observations are much better in overcoming the weakness of self-reported evidence. The authors add that the technique enables the researcher to collect direct information about human behaviour that can only be gathered indirectly by other measurement technique such as written tests.
Peil (1995) argues that observation includes listening, asking questions and often participating in activities of the group to get first hand experience of what daily life involves.

Most observation involves at least presence in the group and most observers are only partial participants. Peil (1995) says that observation involves establishing oneself in the community (such as the school), active data collection and writing up the results. Peil says that observation is an invaluable technique of acquiring a rounded view of a situation. Gash (1992) says that observation means seeing things with a purpose.

Wiersma (1995) says that the mainstay of data collection in ethnographic research is observation and a basic form of data is field notes. In order to investigate into the teaching-learning of the gifted and talented learners in the public primary school, observation as a means of data collection procedure was used to collect primary data for study.

The procedure was used in the study, to observe standard three pupils who are gifted and talented in the mainstream. The teachers and pupils teaching-learning patterns can only be effectively analyzed by observing how respondents behave in an actual classroom situation.

The areas observed were the teaching-learning strategies used by the teacher and pupils, whether teaching-learning resources were available, the way the available resources were utilized in the teaching-learning of the gifted and talented learners, the enjoyment or disinterest during the teaching-learning and the problems encountered in actual classroom teaching-learning. Many different facets of the problem under study were observed and noted by the researcher. The learners' participation in the teaching-learning process for
example, asking and answering question, and the behaviour of the learner in general.

Kothari (1993) highlights that a questionnaire gives the respondents adequate time to give well thought out answers. The questions in the questionnaire were a mixture of open-ended and forced response types. Kothari and Pals (1993) say that whereas the open-ended types of questions give respondents freedom of response, the forced types facilitate consistency of certain data across respondents.

Questionnaire for the teacher focus on the amount of knowledge teachers have about the gifted and talented learners.

An interview is a verbal technique for obtaining data. According to Satyanarayana (1983), interviewing is an appropriate instrument in any study because it helps the interviewer to cover all the dimensions of the investigation through probing of the respondents. Dimensions that were studied through interviewing in this study are the satisfactions and dissatisfactions of the gifted and talented learners about schooling.

Kerlinger (1973) also notes that more people are willing to communicate orally than in writing and, therefore, provide data more readily in an interview.

Prasad (1983) argues that it is possible for the researcher to encourage the respondents to express themselves more freely through an interview. The researcher was also able to probe the respondents and give explanations and clarifications where necessary as regards the problem under study.
The researcher used interviews to gather information on how teachers were prepared for the teaching and learning of the gifted and talented and followed up any questions arising from classroom observation.

To reduce the limitation of the interviews such as inadequate knowledge about the relatives of the respondents which could lead to suspicion and their (respondents) attitude towards the researcher, the researcher endeavoured to establish a friendly atmosphere and create a positive attitude, towards the respondents. Gosh (1992) said that establishment of rapport between the researcher and the respondents is a prerequisite for successful interview.

3.7 Piloting

Bell (1993) emphasis the role of piloting in ascertaining the validity of research instruments. It is generally agreed in principle that observational studies are subjective. To ensure reliability and validity in ethnographic and indeed qualitative research therefore, a considerable amount of time was spent in the classroom for observation and in order to establish rapport with the respondents. The researcher put down as much as possible what was observed in the teaching-learning of the gifted and talented learners.

Interview schedule was also piloted. Purposively selected school and standard three classroom was used for piloting. Also the questionnaire was piloted on the purposively selected school.

Following the pilot report, the instruments were revised as necessary for example by addition of extra items and removal of ambiguous items in the questionnaire and interview schedules for the final collection of data.
3.8 Validity and Reliability
In qualitative research, concepts of validity and reliability are rather complex. Nevertheless to ensure the validity and reliability of the data to be collected was important. Wiersma (1995) emphasizes that ensuring validity and reliability in qualitative research involves the application of a good research method. The author argues further that it is necessary that the researcher develops a relationship with the respondents, who will enable him or her to gain access to reliable information, uses a variety of data collection techniques and collects adequate data. By using a variety of data collection procedures, which included classroom observations, teacher’s questionnaire and interviews, the researcher gathered comprehensive data that enabled thorough exploration of the issue investigated using triangulation method.

3.9 Methods of data collection
Permission and authority from The Ministry of Education Science and Technology (MEST) to carry out the research was sought. The researcher visited the selected school and with the respective school head, arranged to meet the respondents.

With the head teacher’s permission, the standard three teacher in the selected school helped in identifying the gifted and talented learners for familiarization purpose before the instruments were administered.

The teacher was informed of the purpose and significance of the study. During such meetings arrangements were also made regarding when the observations of the class and interviews were to be done and also gave out the questionnaire to the teacher.
When necessary, after every classroom observation an interview followed. Interviewing was done when an occasion presented itself. Questions were asked of those being observed in an attempt to capture the feelings of those observed.

Observations were made twice a week for ten weeks. Observations and interviews were conducted by the researcher. The researcher observed all activities in every lesson during the observation days. The questionnaire was given to the teacher to fill independently after the identification of the gifted and talented children.

3.10 Data analysis

After fieldwork, data collected from observations, interviews and questionnaires was carefully organized. Kerlinger (1973) defines analysis as categorization, ordering, manipulating and summarizing data to obtain answers to research questions. Analysis consists of synthesing the information from the questionnaires, observations and interviews. Patton (1990) argues that mass qualitative data collected from classroom observation, interviews and questionnaires need to be organized into significant patterns to reveal the essence of data. In this study the data was organized according to the research questions.

Qualitative data was collected through questionnaires and was grouped according to research questions and content analysis was conducted.

Descriptive statistics such as frequency counts generated using tally sheets was used and percentages calculated. This helped in making valid conclusions about the research questions.
The information generated through interview schedules, and observation schedules was transcribed into written texts through note taking. The data was examined for completeness and relevance in order to ascertain its usefulness, adequacy and credibility in answering the research questions.

Whereas quantitative analysis helped to numerically establish how the gifted and talented were educated in the primary school mainstream, the qualitative analysis helped to narratively describe the teaching and learning processes of such learners.

3.11 Summary of the chapter

Chapter three dealt with the research design and methodology used in the study. In particular, the research design, study locale, target population, sampling, data collection instruments, methods of data collections and data analysis were components in the chapter.
CHAPTER FOUR

4.0 DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

In this chapter, data is presented, analysed and discussed.

The study set out to explore the teaching-learning of the gifted and talented learners in the inclusive set up. The study attempted to answer the following research questions:

- How are the gifted learners identified?
- How well are teachers prepared for the teaching-learning of the gifted and talented learners?
- What teaching-learning strategies do teachers employ in the teaching-learning of the gifted and talented learners?
- What are the learners' perceptions of the teaching-learning strategies adopted viz-a-viz their ability to learn?
- How suitable is the content taught to the gifted and talented learners?
- How suitable are the evaluation strategies adopted for gifted and talented learners?
- How do teachers and learners utilize the available resources in the teaching-learning process.

The content of this chapter is based on the results of the stated research questions of the study.
4.2 Identification of the gifted and talented learners

One of the objectives of the study was to find out how gifted and talented learners are identified in Mwangaza Primary school.

During research, identification of the gifted learners took a multiplicity of facets. The process involved Test 1, test 2, teachers nomination, peer nomination, observation and questionnaire. Table 4.1 The data on the identification of the gifted and talented learners.

<table>
<thead>
<tr>
<th>Description</th>
<th>No. of learners considered</th>
<th>No. of learners identified</th>
<th>Percentage of learners identified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test 1</td>
<td>80</td>
<td>20</td>
<td>25%</td>
</tr>
<tr>
<td>Test 2</td>
<td>20</td>
<td>3</td>
<td>15%</td>
</tr>
<tr>
<td>Teacher nomination</td>
<td>80</td>
<td>3</td>
<td>4%</td>
</tr>
<tr>
<td>Peer nomination</td>
<td>80</td>
<td>3</td>
<td>4%</td>
</tr>
<tr>
<td>Observation</td>
<td>80</td>
<td>3</td>
<td>4%</td>
</tr>
<tr>
<td>Questionnaire</td>
<td>3</td>
<td>3</td>
<td>100%</td>
</tr>
</tbody>
</table>

Test one incorporated all tests taken from standard one in the years 2001 to standard three in the year 2003 as reflected in Appendix five. Three learners were identified as gifted due to their consistency in performance earning/scoring high scores well above average. Learner I was able to obtain 494.6 marks for three years out of a possible 500. Learner II was able to obtain 496.2 marks and Learner III obtained 495.4 marks.
Test 2 was administered to 20 learners who were selected using test one results. Test two composed of Raven's (1958) standard progressive matrix. A sample of test of the test is shown in Appendix six. Three learners had no problems with the test and again were identified as gifted. Test two consisted of twelve items, selection of gifted learners was based on performance. Learner I got 100%, learner II got 98% and learner III got 100%. Learners who got the items right were selected.

The class teacher was asked to nominate the best learners in the class and the best three learners identified by test one and two were picked. The peers were also asked to nominate their best performing peers in class and the same learners were picked.

During interviews with the teacher of standard three in Mwangaza Primary School on how they identify the gifted learners. The teacher said that:

*Gifted learners are outstanding in their performance*.
*I have no problem with their work and they finish long before everyone else. Things that they know are amazing for their age.*

From the above response, it can be seen that the teacher is aware of the gifted and talented learners in her class. The observation made by the class teacher was consistent with Shaner (1991) who says that gifted learners finish their assignments earlier than other peers.

During peer nomination in the classroom for the gifted learners, one learner said:

*Learner I is very clever. He gets everything in the exam. Sometimes he knows things that we are not taught.*

Another child said:

*Learner II is very bright. He helps us do homework and group work when the teacher is not in.*
Another child said:

*Learner III is the brightest of all. She can teach when the teacher is not in Class.*

From the above responses, one notices that peers are aware of the learners in the class who are excellent and have confidence in what they do. Clinkenbeard (1991) notes this characteristic of gifted learners dominating the class work.

Through thorough observations, questions, tests, interviews and nominations, 3 learners were found to be gifted and talented and used for the study. Appendix four was used by the researcher when observing the characteristics of the identified gifted and talented learners. Learner I was able to elicit eighty five percent of the characteristics. Learner II elicited eighty five percent of the characteristics. While learner III elicited seventy nine percent. This shows that the learners were well above average and hence gifted.

Appendix 2 was used by the teacher for rating learners that she had identified as gifted and talented who were four percent of the total class population of eighty learners. The questionnaire filled by the class teacher indicated that, the three learners had most of the characteristics of potentially creatively and talented learners. Out of forty six characteristics, learner one had thirty six double checks which meant excellent. In the characteristics and ten single checks which meant good and had no blank. These results show that learner one is gifted. Learner two had thirty eight double checks, six single checks and two blanks which also means that the learner was well above average. Learner three had thirty four double checks, ten single checks and two blanks also showing that the learner is gifted and talented.
Table 4.1 shows that four percent of the learners in the class were gifted. This observation is consistence with The National Centre for Educational Statistics (1989) which noted that three percent to five percent are typically cited to reflect the extent of giftedness and talentedness in a school population.

4.3 Teacher’s preparedness for the teaching-learning of the gifted and talented learners

One of the objectives of the study was to find out how well teachers are prepared for the teaching-learning of the gifted and talented learners.

Curriculum for gifted learners should include more elaborate, complex and in-depth study of major ideas, problems and themes that integrate knowledge with and across systems of thought.

The teacher should prepare for the gifted learners in order to allow for the development and application of productive thinking skills that enables learners to conceptualize existing knowledge or generate new knowledge. Learners should be encouraged to explore constantly changing knowledge and information, and to develop the attitude that knowledge is worth pursuing in an open world.

During the research, the questionnaire was administered to one teacher. Though the teacher indicated very well who the gifted learners were, in the interview the teacher indicated that she had no special assignment for the gifted and talented learners.

During classroom observations in the school, it was noted that when the gifted learners finished work early they were given more of the same work or were
busy writing and reporting noise makers to the teacher. This view is supported by Shaver (1991) who found that when gifted finish assignment early, they are given more of the same type of work or assigned more of the same type of tasks at the onset.

Gifted and talented learners require well planned programmes that accommodate their diversity in interests and capacity. Their learning process should include materials that will offer challenge as Reis and Schack (1993) noted that gifted learners spend minimum effort while earning high grades. Many gifted and talented learners are able to handle general education curriculum with ease. But the long term effect of being able to excel without working hard will be a lack of working habits needed for challenging programmes at a later point in time.

Teachers for the gifted need not to be gifted themselves. However, careful planning is required to offer direction. Lopez and Mackenzie (1993) noted that differentiation of the programmes for the gifted and talented learners should be indepth, scope, pace and self-directedness of the expectations.

4.4 Teaching-learning strategies that teachers employ in the teaching-learning of the gifted and talented learners.

One of the objectives of the study was to find out the teaching-learning strategies that teachers employ in the teaching-learning of the gifted learners. Gallagher (1997) said problem solving strategies provide an excellent way of imparting knowledge to learners.
During the research observation on the teaching-learning strategies used by the teacher while teaching were noted. Table 4.2 presents the teaching-learning strategies. The frequency was arrived at after the researcher visited the class for ten weeks. Every week went to school for two days and everyday observed five lessons. Therefore, a total of 100 observations were made.

**Table 4.2 Teaching-learning strategies used by the teacher**

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questioning</td>
<td>92</td>
<td>92</td>
</tr>
<tr>
<td>Reading aloud</td>
<td>68</td>
<td>68</td>
</tr>
<tr>
<td>Explaining</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Discussion</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Assessment</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Group work</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Discovery</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Self Reading</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

Table 4.2 illustrates that there were seven main categories of pedagogical approaches. They are:

- Questioning,
- Reading aloud,
- Explaining,
- Discussion,
- Assessment,
- Group work,
- Discovery,
- Self Reading

More specifically, the table indicates that 100 responses (100%) were that explaining was a major approach used by the teacher in the teaching. The teacher explained that she used explanation to introduce new concepts.
because the approach was easy, the class was large, and every child would listen.

During classroom observation in the one case study school, it was noted that explaining occupied an integral part in the teaching. Virtually, during the entire lesson the teacher was involved in explaining. However, it was noticed that gifted learners were used by the teacher to repeat her explanation to the rest of the class. Where there was enhanced learning through groups, the gifted learners were used as leaders of the groups. The gifted learners would get verbal reinforcements like “very good” or “well done” from the teacher. As the teacher explained, sometimes the learners could be doing their other interesting work, if what the teacher was explaining was not challenging to them.

Clinkenbeard (1991) pointed out that when gifted and talented learners are involved in group activities, they may end up doing all of the work. This emerged quite well when the teacher divided the class in groups, and every child wanted to be in the groups with the gifted learners. In the process, the gifted learners ended up doing all the work for the group.

Reading aloud was used when introducing new concepts in languages. The vocabulary to be introduced during the lessons was first written on the blackboard and the gifted learners were always given the first opportunity to read to the rest of the class. They would read the words while the others repeat after them. The words did not challenge the gifted learners. Clark (1997) says that vocabulary use in the average classroom is inappropriate for advanced learners. Advanced levels of critical thinking are not typically
incorporated into lessons. Oral Questions were used when introducing the lesson and mainly referring from the previous lesson and at the end of the lesson as a summary of the lesson.

Discussion came in during story telling lessons in which learners were to discuss the emerging issues from the story. The discussion presented no challenge to the gifted and talented learners. Assessment was not frequently done though the gifted learners would present assignment to the teacher which they had done on their own well ahead of other learners.

The teacher tended to use lecture methods in teaching to cover curriculum content in good time for learners to pass well in examinations. Problem solving (discovery) strategy provides an excellent way of imparting knowledge to gifted learners (Gallagher 1997).

The major ways of addressing the needs of gifted learners in general education are through the use of acceleration, enrichment or special grouping as opposed to the typical general education practices with the average learners which the curriculum is made to suit.

4.5 Learners' perception of teaching-learning strategies adopted viz their ability to learn

One of the objectives of the study was to find out the learners' perceptions of teaching-learning strategies adopted by their teachers viz their ability to learn. Learners capability and interest should be core objectives of any teaching-learning programme.
During the research, interviews were held with the three gifted and talented learners.

Table 4.3 indicates the learners preferred subjects and methods of study.

**Table 4.3 Learners' preferred subjects and methods of study**

<table>
<thead>
<tr>
<th>Learners</th>
<th>Subjects</th>
<th>Methods of study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Okoth</td>
<td>All subjects</td>
<td>Discovery</td>
</tr>
<tr>
<td>Wanjiru</td>
<td>English &amp; Kiswahili</td>
<td>Self reading</td>
</tr>
<tr>
<td>Wanderi</td>
<td>Maths &amp; Science</td>
<td>Discovery</td>
</tr>
</tbody>
</table>

Table 4.3 represents the gifted learners identified subjects they are gifted in and methods they like most in learning.

During the interview held with the three learners, they said like reading course books ahead of the teacher and cover the supplementary books well in advance before the end of the year.

One of the learners said:

"I don't like the way our teacher dominates the class and keeps on sending me every now and then”

Another learner said:

"After finishing my work before others, the teacher gives me more of it from other books Standard three work is so easy for me and I feel like I am wasting time”

In these responses, the learners indicate their displeasure with the way they are taught. Their major modes of study being self directed, discovery and intuition as opposed to explanations which the teacher used most, their need to realize their full potential was not addressed.
Gifted and talented learners may end up being underachievers as diversity and complexity in content and teaching learning strategies lack in the curriculum presented to them.

4.6 Suitability of the content taught to the gifted and talented learners

For the gifted and talented learners to realize their potential they require an education curriculum which is differentiated in range and complexity from the general education curriculum. One of the objectives of the study was to find the suitability of the content taught to the gifted and talented learners.

During research, the questionnaire was administered to the teacher. The teacher responded that she used the recommended standard three books in the teaching of the general class and used no other content.

The inference is that the content taught to the gifted and talented learners is the same as what is taught to the average learners and slow learners. This observation is however in discordant with previous findings about the same which indicate that schools may develop enrichment programmes, say by providing advanced material for the exceptional minded (Ogonda 2004).

During classroom observation, it was noted that gifted learners had their own additional materials that included story books, word puzzles, logic games and magazines which the teacher discouraged as she complained of the children lacking control.

An array of different learning-related materials for use with gifted learners like magazines, artifacts, software, CD-ROMs, internet sources and other media are necessary in the teaching and learning of gifted learners.
The content used with gifted and talented learners was limited in range and complexity. The gifted and talented learners are bound to underachieve as the content delivered to them is not challenging. They are able to earn high grades with minimum effort. The spirit of hard work may not unfold and hence challenging work at a later date may not be realized.

In summary, the inference is that gifted and talented learners in the general education setting can realize their potential with the support of the classroom teacher. The responsibility to deliver a quality education to gifted learners in general education settings rests on the shoulders of the instructional staff, especially general education teachers. Given the realities of the general education classroom, teachers face a mighty challenge in meeting the needs of gifted learners.

4.7 Evaluation strategies the teacher adopted for the gifted and talented learners

One of the objectives of the study was to find out the suitability of the evaluation strategies adopted for gifted and talented learners. Gifted learners should be evaluated with emphasis on their ability to perform at a level of excellence that demonstrates creativity and higher-level thinking skills (Cline S. and Schwartz D., 1999)

During classroom observation in the school, I noted the distinctive evaluation strategies adopted by the teacher as presented in Table 4.4
Table 4.4: Evaluation strategies the teacher used.

<table>
<thead>
<tr>
<th>Evaluation strategy used by the teacher</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral questions</td>
<td>100</td>
<td>100.0</td>
</tr>
<tr>
<td>Filling gaps</td>
<td>10</td>
<td>10.0</td>
</tr>
<tr>
<td>Multiple choices</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>Assignments from course books for homework</td>
<td>50</td>
<td>50.0</td>
</tr>
<tr>
<td>Group work project</td>
<td>1</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Table 4.4 illustrates that five main categories of evaluation strategies were generated namely: oral questions, filling gaps, multiple choices, assignments and group work project.

More specifically the table indicates that 100 times (100.0%) were that oral questions was a major evaluative strategy. The teacher used oral question in every other lesson to establish the learners’ memory and understanding of what she taught. Oral questions were mostly used at the start and end of the lesson.

Oral questions were used at the start of the lesson to find out whether learners could remember what was taught previously. Oral questions were occasionally used to provide insight of what the teacher wanted to introduce to learners. And also oral questions were used at the end of the lesson by the teacher to find out how well the learners understood the new concepts she taught. The gifted learners had no problems with the questions, otherwise, they asked the teacher more questions about the subject in question.
During the interviews, the teacher explained that she preferred oral questions because she would get immediate feedback from the whole class about what she had taught. She added that the learners were able to express themselves hence instilling confidence in them. The gifted learners also said they were able to speak out more about their memories, thoughts and ideas emanating from what they learn.

During classroom observation, the researcher noted that the teacher evaluated the learners using questions that required filling of gaps. The gifted learners had no problems with the questions as they finished their work long before others and usually got everything correct. The gifted learners explained that the questions were usually very simple to them.

During research, the researcher observed that multiple choice questions were administered twice a term. The questions were many. They included what had been covered by the teacher in the class. The gifted learners indicated that the questions were just but very easy for them as every time they would top in the class and with all the marks, and if not, losing one or two marks.

During interviews with the teacher at Mwangaza Primary school, the teacher indicated that she gave assignments once after two weeks. The teacher said that the two weeks gave her enough time to go through the assignments because the number of learners she was handling was overwhelming. During interviews with the gifted learners, they indicated that assignments were the best for them as they consulted different books/resources to do their assignments. For example in mathematics they indicated that they used
textbooks like Primary Mathematics, Understanding Mathematics, Mathematics made easier, Maths aid etc, as opposed to only the course book used by the teacher for teaching which was not challenging.

During classroom observations, the researcher noted that the teacher had assigned learners projects in groups which were to be carried out throughout the term. They were grouped so that one group did the project different from the others.

During interview with the teacher, she explained that the projects were nature corner, shop, and wall chart display. The teacher said that these projects helped her children stay focused on their responsibilities as a team. However, the gifted learners expressed their dissatisfaction with the groupings as each one of them had interest in a particular project. One of the gifted learners indicated that he wanted to be with the group at the nature corner but was on the wall chart display group.

Gifted and talented learners have their interests and unless those interests are nurtured, then they may not realize their potential.

4.8 Teachers and learners utilization of the available teaching-learning resources

The researcher set out to find out how teachers and learners utilize the available resources in the teaching-learning process. Teaching-learning resources for the gifted and talented learners should be varied in quantity and complexity and to suit their varied needs. Clark (1997) stated that learning materials should be unlimited in range and complexity.

During research, interviews were carried out with the teacher and learners.
Four main resources were generated namely: course books, supplementary books, charts and real objects.

Course books were major teaching-learning materials. The teacher explained that she used the course book as it is recommended by the Ministry of Education and contains facts that can be examined at the end of the course.

During classroom observations, I noted that course books occupied an integral part in the teaching-learning process. The gifted and talented learners indicated that they were through with the course books and they no longer interested them.

During the interviews, the teacher indicated that she used supplementary books with learners, more so with the gifted learners for assignments as they had mastered most of the concepts in the course books. The gifted and talented indicated that supplementary books gave them more work.

Charts as a teaching-learning material was not commonly done. During observation, the teacher occasionally used charts for teaching-learning. The teacher complained of lack of time to prepare charts for teaching due to large numbers of learners she was handling. Gifted and talented learner expressed satisfaction with the teaching-learning by use of charts as they said charts provide a real picture of what the teacher is teaching.

Real objects were rarely used as observed from the study. The few real objects the teacher used were readily available in the classroom or were brought by learners.
Teaching-learning resources used with the gifted and talented learners in Mwangaza Primary School were limited in range and complexity.

In summary, it was found that course books, supplementary books, charts and real objects were the major teaching-learning resources used in the teaching-learning of the gifted and talented learners. It is these teaching-learning resources that provide the means by which gifted and talented learners can realize their potential. However, more and other teaching-learning resources need to be used to provide diversity in the teaching-learning of the gifted and talented learners in order to realize their diverse potentials.

4.9 Summary of the chapter
In this chapter, the data collected has been presented, analysed and discussed in relation to the research questions. The following areas have been explored: the identification of the gifted and talented learners, teacher’s preparedness for the teaching-learning of the gifted and talented learners, teaching-learning methods adopted by the teachers, learners’ perception of teaching-learning methods adopted viz their ability to learn, suitability of the content taught to the gifted and talented learners, the evaluation strategies the teacher adopts for the gifted and talented learners and teachers’ and learners’ utilization of the available teaching-learning resources.
CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a Summary of Research Findings, Conclusion, Recommendation of the Study and Suggestions for Further Research.

The purpose of this study was to investigate the role played by teachers in helping the gifted and talented learners realize their potentials. The study adopted an ethnographic design. It was conducted in Mwangaza Primary school, Nairobi, Kenya. Data was collected by use of questionnaires, interviews, and classroom observations.

5.2 Summary of Research Findings

The study found that:

- The teacher was aware of the existence of the gifted and talented learners in their classes.
- The teacher was not well prepared for the teaching-learning of the gifted and talented learners.
- Curriculum content was not well adopted for the teaching-learning of the gifted and talented learners.
- The teaching-learning strategies the teacher employed in the teaching-learning of the gifted and talented lack room for creativity.
- Gifted and talented learners felt that teaching-learning strategies employed by the teacher were boring.
- Variety of teaching-learning resources available were used by the teachers.
• Evaluation strategies used by teachers for the gifted and talented learners were inadequate.

5.3 Conclusion
From the forementioned findings, it can be concluded that inclusive education for the gifted and talented learners has been limited in that:

• General education curriculum does not challenge gifted learners.
• Most academically gifted learners have already mastered most of the required curriculum offered to them.
• Classroom teachers do little to accommodate learning needs of gifted learners.

5.4 Recommendations of the Study
The study therefore recommends that:

• Since the teacher was aware of gifted and talented learners in her class, schools should put in place mechanisms that are diverse in identification of specific giftedness and talentedness.
• Teachers should be sensitized through workshops, seminars and conferences to equip them with ways and means of helping gifted and talented learners achieve their potential.
• Since the content taught is structured to fit a specific class, it should be enriched to give challenge to the gifted and talented learners.
• Teachers should adopt learner-centred teaching-learning strategies that will foster creativity, discovery and intuition for the gifted and talented learners to realize their potential.
• Diverse teaching-learning resources should be offered and well utilized in the teaching-learning of the gifted and talented learners. Divergent thinking capacities call for divergent learning resources for full conceptualization of concepts learnt.

• Since teachers employ inadequate evaluation strategies, incorporation of practical evaluation procedures should be encouraged by the Ministry of Education, Science and Technology so that learners gifted in practical work can be given a chance to display their potential.

• The Ministry of Education, Science and Technology should formulate and enforce policies that help the gifted and talented learners realize their potential so that our country benefits from a well informed human resource.

5.5 Suggestions for Further Research

• This study evaluated only learners who are gifted and talented in standard three. Other evaluative studies need to be done on other aspects that affect the teaching and learning of the gifted and talented learners in other schools, classes such as the implementation of recommendations made for the education of the gifted and talented learners.

• This study needs to be replicated in other districts in the country in order to give a general picture of the education of the gifted and talented learners in the whole country.

• A more comprehensive study of the structure of the curriculum of a particular class for the gifted and talented learners should be done.


KISE and UNISE (2000). Distance Learning Special Needs Education Module 1; Introduction to Special Needs. Nairobi: KISE.


APPENDIX 1

Interview Schedule for the Teacher

Name of Institution ..........................................................................................................

Address..........................................................................................................................

Tel:..............................................................................................................................

1. Sex ( ) Male ( ) Female

2. For how long have you taught?

3. Do you have any training in special education? (a) ( ) Yes ( ) No
   (b) If yes for how long did you train .................................................................

4. Where did you train .................................................. Level of achievement
   ..............................................................................................................................

5. If you are trained on how to handle and teach such children in an inclusive educational environment, would you like it: (a) ( ) Yes ( ) No.
   (b) Give reasons ..................................................................................................

6. Do you have gifted and talented learners in your class? ( ) Yes ( ) No
   .............................................................................................................................

7. How do you evaluate them?

8. How have you been assisting them?
9. Would you like to teach the gifted and talented? ( ) Yes  ( ) No.
( ) Not Sure.

10. If Yes, give reasons.................................................................................................

11. What do you do with the gifted and talented when they finish their work earlier than others.
........................................................................................................................................

12. What challenges do you face when dealing with the gifted and talented learners ..........................................................
APPENDIX 2

Questionnaire for Teachers

Observational scale for rating thinking and feeling characteristics of potentially creatively and talented learners

Name: ___________________________

Date: ______________________________

Grade: ______________________________

School: ______________________________

Age: ________________________________

Teacher or person completing this scale ____________________________

How long have you known this student ____________________________

Instructions for use of the scale. There are eight (8) observational factors on which this scale is based. Under each you will find six (6) characteristics for observing a learners behaviour within the factor. These are specific ways to look at students who may be gifted and creative. Consider all six characteristics and check as many as apply to your observation to learners. Check the characteristics in this way, Double check (√ √ ) those items under each of the eight factors if the characteristic is observed most of the time to considerable degree. Single Check (√ ) those items under each of eight factors if the characteristic is observed only occasionally. Do not check (leave blank) any item of the eight factors if the characteristic is seldom or never observed. Then analyse using the table on the findings.

1. The learner is a FLUENT thinker
The learner who thinks of a number of answer when a question is asked.

The learner who draws several pictures when asked to only draw one.

The learner who usually has several ideas about something instead of only one.

The learner who asks many questions.

The learner who uses a large number of words when expressing himself or herself.

The learner who is the fastest worker in the class, who produces more than others do.

2. The learner is a FLEXIBLE thinker.

The learner who thinks of various ways to use an object other than its common use.

The learner who has different interpretations of a picture, story, poem or problem.

The learner who can apply a principle or concept in objects other than the one in which it was introduced.

The learner who will have a variety of ideas without sticking to only one.

The learner who thinks of a number of different possibilities for solving problems.
3. The learner who is dissatisfied with the common answer and instead seeks a fresh approach.

_________ The learner who is a nonconformist and cannot help being different by having a new twist in thinking about things.

_________ The learner who enjoys the unusual and dislikes doing things the way everybody else does them.

_________ The learner who, after reading or listening to a problem, will go to work inventing a new solution.

_________ The learner who will question the old way and try to figure out a new way.

4. The learner is an ELABORATIVE thinker

_________ The learner who will add lines, colours, and details to his or another student’s drawing

_________ The learner who will sense a deeper meaning to answer or solution by producing more detailed steps.

_________ The learner who takes off this someone else’s and changes it or adds on it.

_________ The learner who will want to embellish upon the work or ideas and changes it or adds on it.

_________ The learner who is interested in things that are plain and attempts to add details to make them more beautiful or exciting.
The learner who senses something lacking in his or her productions or creations and adds on details to improve them.

5. The learner is CURIOUS and INQUISITIVE by nature

The learner who questions everything and everyone.

The learner who loves to explore mechanical things.

The learner who is constantly searching for new ways or new ideas.

The learner who continually explores books, games, maps, pictures, etc.

The learner who needs to explore something unfamiliar and exploration is a natural part of his/her behavior.

The learner who is sensitive to problems and alert to details that produce possible solutions.

6. The learner is IMAGINATIVE and can visualize or dream about things that have never happened to him or her.

The learner who can predict what someone else has said or done without ever knowing that person.

The learner who predict what someone else has said or done without ever knowing that person.

The learner who can predict what someone else has said or done without ever knowing that person.

The learner who dreams about things without leaving the room.
The learner who likes to imagine things he has never seen.
The learner who can see things in a picture or drawing that no one else has seen.
The learner who can wonder about something that has never happened.

7. The learner is COMPLEX by nature and likes to tackle difficult problems or tasks.
The learner who becomes intrigued with intricate or complicated situations.
The learner who likes to delve into the most involved task.
The learner who wants to figure out for himself or herself without help.
The learner who enjoys things harder to do than others.
The learner who thrives on trying again and again in order to gain success.
The learner who seeks more difficult answers rather than accepting an easy one.

8. The learner is COURAGEOUS and a RISK TAKER, not afraid of a failure or criticism.
The learner who will defend his or her idea regardless of what other think.
The learner who will set high goals of accomplishment and not be afraid of trying to reach them.

The learner who will admit to a mistake or failure

The learner who really likes trying something new and not easily influenced by is her friends.

The learner who is not concerned by disapproval from classmates, teachers or parents.

The learner who prefers to take a chance or date just to see where it will take him or her.

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Conclusion .................................................................

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

Adapted from (Williams 1978).
APPENDIX 3

Interview Schedule for Learners

Name of school ___________________________________________________________ 

Name of learner __________________________________________________________

Gender: Male ( ) Female ( )

1. Where did you go for your Nursery school education? _______________________

2. When did you join this school? __________________________________________

3. Do you like this school? _______________________________________________
   Why? ___________________________________________________________________

4. What do you like about this school? _______________________________________

5. What don’t you like about this school? ____________________________________

6. What do you like about your class? _______________________________________

7. What don’t you like about your class? ____________________________________

8. What do you like doing most in school? _________________________________

9. What things do you have to do it? _______________________________________

10. What work are you given by your class teacher which is not give to other 
    learners in the class? ___________________________________________
APPENDIX 5

Test one summary results for learners I, II and III

Source – School Report

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<th>TERM II MAX. MARKS 500</th>
<th>TERM III MAX. MARKS 500</th>
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CMS - Class Mean Score
Max. - Maximum

Grand average
Class - 429.8
Learner I 494.6
Learner II 496.2
Learner III 495.4
APPENDIX 6
Test 2 Sample

Source: Raven (1958) page 1