FACTORS AFFECTING ACCESS AND RETENTION OF CHILDREN WITH SPECIAL NEEDS IN SELECTED PRIMARY SCHOOLS IN NAIROBI PROVINCE.

BY

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A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF EDUCATION IN PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE AWARD OF THE DEGREE OF MASTER OF EDUCATION (IN PLANNING) OF KENYATTA UNIVERSITY

JUNE 2011

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Factors affecting access and retention
DECLARATION
This proposal is my original work and has not been presented for any of the study
programme in any university

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DEDICATION

This proposal is dedicated to the Almighty God who gave me the physical and mental strength to undertake and accomplish it within the stipulated time.

Secondly, the work is dedicated to my late dad Cosmas Ogutu Okwany.

I also dedicate the work to my mum, my husband and my children for their prayers, support and encouragement.
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May the Almighty God bless you all. Amen.
ABSTRACT

Education is a basic right to all children regardless of their abilities or disabilities. Majority of the learners with special needs in Kenya do not access educational services. In 1999 for example, there were only 22,000 learners with special needs in schools. This number rose to 26,885 in 2003 and to 45,000 in 2008. This compares poorly with the proportion in general education. This is a clear indication that more children with special needs do not access education. It is for this reason that the current study investigated the factors affecting access and retention of children with special needs in selected primary schools in Nairobi. The objectives of the study were to analyze the trend in access and retention of children with special needs between years 2003 – 2010 and to assess both the school and home based factors affecting access and retention of children with special needs. The study was based on classical liberal theory of equal opportunity and social Darwinism. The research adopted a descriptive research design which involved collection of information through questionnaires for headteachers and teachers as well as interview schedules for parents of children with special needs. The subjects of the study included (37) headteachers, (103) teachers and (980) parents. The total sample size was 108 (17.61%) comprising of 12 (32.43%) headteachers, 32 (31.06%) teachers and 64 (16.88%) parents. The sample schools/units were selected using simple random sampling procedure. Sample population of teachers and parents of learners with special needs were drawn from Krejcie & Morgan’s (1970) tables for determining appropriate sample size.

A pilot study was carried out in a school which was not part of the study. To test reliability of the research instruments, a test – retest method was administered. To test validity, a panel of two members of the department were requested to assess the relevance of the content used in the research instruments. Spearman’s coefficient of correlation formula was employed to compute the correlation coefficient. A correlation coefficient \( r \) of 0.832 was worked out and since a \( r \) of 0.75 was considered high enough to judge the reliability of the instruments, the research instruments were therefore found to be reliable. Data was collected by the researcher and analyzed both quantitatively and qualitatively. Qualitative data was analyzed thematically. Some qualitative data was used to analyze quantitative data. The Statistical Package of Social Sciences (SPSS) aided the analysis of the data collected. The study revealed that though the government funds special education, 62.5% of the respondents felt that the funding was inadequate. Parents’ level of education was also seen as a factor which highly affects access and retention of learners with disabilities. On the issue of importance of special education, 49% of the parents’ respondents’ perceived special education as being very helpful to their children with disabilities, while 59% of the same respondents reported that special education is fairly helpful to their children. Other components which affected access and retention of children with special needs included transport, education, meals, and equipments such as Braille machines, hearing aids, calipers and wheelchairs. The study recommended that the government need to provide sufficient funds to special schools as well as ensuring that all headteachers provide up to date enrolment and retention data. The government should also create awareness on the importance of education to children with disabilities.
### LIST OF ACRONYMS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
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<tbody>
<tr>
<td>CWA</td>
<td>Children with Disability</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Develop</td>
</tr>
<tr>
<td>EFA</td>
<td>Education for All</td>
</tr>
<tr>
<td>FAWE</td>
<td>Forum for African Women Educationist</td>
</tr>
<tr>
<td>FBE</td>
<td>Free Basic Education</td>
</tr>
<tr>
<td>GOK</td>
<td>Government of Kenya</td>
</tr>
<tr>
<td>IPAR</td>
<td>Institute of Policy Analysis and Research</td>
</tr>
<tr>
<td>HI</td>
<td>Hearing Impaired</td>
</tr>
<tr>
<td>KESSP</td>
<td>Kenya Education Sector Support Programme</td>
</tr>
<tr>
<td>KIE</td>
<td>Kenya Institute of Education</td>
</tr>
<tr>
<td>KISE</td>
<td>Kenya Institute of Special Education</td>
</tr>
<tr>
<td>MDG's</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>MH</td>
<td>Mentally Handicapped</td>
</tr>
<tr>
<td>MOE</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td>PH</td>
<td>Physically Handicapped</td>
</tr>
<tr>
<td>PWDs</td>
<td>People with disabilities</td>
</tr>
<tr>
<td>SNE</td>
<td>Special Needs Education</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical Package for Social Sciences</td>
</tr>
<tr>
<td>TSC</td>
<td>Teachers Service Commission</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Education Sciences</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children's Fund</td>
</tr>
<tr>
<td>UPE</td>
<td>Universal Primary Education</td>
</tr>
<tr>
<td>VI</td>
<td>Visually Impaired</td>
</tr>
</tbody>
</table>
CHAPTER ONE
INTRODUCTION
1.1 Background to the study
According to the Salamanca statement and Framework for Action on Special needs education (UNESCO, 1994), the right of every child to an education is proclaimed in the universal declaration of Human Rights and was reaffirmed by the world declaration on Education for All (EFA). Every person with a disability has a right to express his/her wishes with regard to their education, as far as this can be ascertained, parents have an inherent right to be consulted on the form of education best suited to the needs, circumstances and aspirations of their children.

The guiding principle that informs the framework for Action on Special Needs Education is that schools should accommodate all children regardless of their physical, intellectual, social, emotional, linguistic or other conditions. Special educational needs according to UNESCO (1994), refers to all those children and youth whose needs arise from disabilities or learning difficulties.

Providing education as a right is an obligation of all governments and requires that they translate their national commitments into legislation. Universal Primary Education (UPE) is a global goal which will only be achieved when the universal right to education extends to individuals with special needs and disabilities in the country (Ministry of Education, 2009). In a meeting held in 1990 in Jomtein Thailand, Education as a human right was reaffirmed by 155 nations who adopted and were signatories to the world declaration on Education for All (EFA) by the year 2000.
According to the Minister of Education, the Ministry of Education is a crucial subsector for accelerating the attainment of Education for all (EFA) and the Millennium Development Goals (MDGs). The acting permanent secretary of education says that the Ministry of Education together with stakeholders and partners have developed the National Special Needs Education (SNE) policy framework to address critical issues related to education for learners with special needs. The education secretary further adds that people with disabilities (PWD) make up 10% of the total population of Kenya, approximately 3.5 million people. He says that the most disadvantaged and marginalized groups experience discrimination at all levels of society (MOE, 2009).

In 2008, there were 1341 special units and 114 public special schools in the country which included vocational and technical institutions that cater for learners with special needs and disabilities (MOE, 2009). This is still inadequate despite the government’s commitment to support the provision of equal access to education by all children.

The Government of Kenya (1964) in the Ominde report on children with disabilities recommended that schools for children with special needs in receipts of grants out of public funds have hither to be grant – aided under the existing grant rules. It was suggested that grant rules be drawn up which take account of the special needs and circumstance of such schools.
The subsequent Gachathi Commission (GOK, 1976) on the other hand made various recommendations on special education which included; expanding existing amenities and establishing additional services to enable handicapped children to be integrated into normal schools as far as possible. It also recommended that handicapped children should possess basic individual literacy equipment as well as the government to establish additional services for children with multiple handicaps.

The Koech report (GOK, 1999) recommended the establishment of a National Special Education Advisory Board and noted that there was no comprehensive SNE policy or legal framework on SNE despite existence of various policy guidelines. The report further recommended that cost sharing for the disabled be abolished and instead free and quality education be provided by the government. Budgetary allocation to special education was also to be increased.

Despite various educational reports coming up with recommendations on special education, enrolment rates and educational attainment of children with disabilities still lag far behind those of their non disabled peers. The school enrolment rate of children with disabilities is estimated to be some 2 to 5 per cent in developing countries, a deficit that far exceeds those of other high - risk groups such as girls, children from rural areas or from low income families (Filmer, 2008).

According to Kenya Education Sector Policy overview paper (2006), initiatives have focused on the attainment of EFA and in particular, Universal Primary Education (UPE).
The key concerns are access retention, equity, and quality relevance, internal and external efficiencies within the education system. The government is committed to the provision of quality education and training as a human right for all Kenyans in accordance with the Kenyan law and the international conventions, such as EFA goal.

The Government of Kenya education policy overview paper (2006) states that the population of people with special education needs in Kenya is estimated at 10% of the total population, about 25% of these are children of school going age. The GoK (2006) states that enrollment in special education is low given that out of a total population of 750,000 children with special needs who have reached school going age, only an estimated 90,000 have been assessed to establish the nature of their special needs. In 1999 for example there were only 22,000 learners with special needs and disabilities in schools. However the number rose to 26,885 in 2003 and to 45,000 in 2008, which compares poorly with the proportion in general education (Ministry of Education, 2009).

Few studies have investigated the retention of students with disabilities. Barnett, et al, (1998), McLeskey & Grizzle, (1992), investigated the retention rates of students with learning disabilities in Indiana. They found that about 58% of all students with learning disabilities were retained prior to determination of their eligibility for education services.

According to City Education (2009) most learners with disabilities are retained in schools for a while. Majority of these learners are usually withdrawn before they sit for their national examinations at Primary level.
According to Eilor (2005) education of children with special learning needs has been prioritized in Uganda. A department to cater for their needs has been created within the Ministry of Education and Sports (MOES). In order to develop education of learners with learning difficulties including learners with disabilities, an agreement between the Governments of Uganda and Denmark was signed in 1991 and expired in 2002, covering two separate, but mutually related programmes.

According to the GoK (2005), the gender policy in education singles out education for learners with special needs and disabilities as an area of specific focus. This policy states in part that to increase participation, retention and completion for learners with special needs and disabilities, the government should provide an enabling (legal and policy) environment. This should be done through flexing curriculum, providing trained personnel, equipment and facilities and ensuring accommodative physical infrastructure for learners with special needs and disabilities. The GoK (2005), states that there is need to create public awareness on causes of special needs and disabilities especially in rural areas. Coordination of early intervention and assessment of children with special needs and disabilities should be reinforced.

Educational opportunities for children (learners) with special needs and disabilities however are a major challenge to the education sector. The national education system has been characterized by inadequate systems and facilities that respond to the challenges faced by learners with special needs and disabilities.
Although the government has made progress in the provision of educational services for persons with special needs and disabilities, it has also faced various challenges. According to the Ministry of Education (2009), in the National Special Needs Education Policy Framework, these challenges included; inadequate data on children with special educational needs, lack of comprehensive policy on SNE and lack of appropriate tools and skills for early identification as well as inadequate skilled manpower and inappropriate placement of children with special needs and disabilities.

According to the Ministry of Education (2009), in Education facts and figures 2002 – 2008, there were 926 Special Needs Education Institutions in 2002, which increased to 1,574 in 2008. Most of these institutions are units integrated into the normal (regular) primary schools.
Table 1.1 Number of Special Needs Education Institutions by category, 2002 – 2008

<table>
<thead>
<tr>
<th>Category</th>
<th>2002</th>
<th>2003</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary special schools</td>
<td>94</td>
<td>97</td>
<td>109</td>
</tr>
<tr>
<td>Units / integrated</td>
<td>726</td>
<td>1,100</td>
<td>1,340</td>
</tr>
<tr>
<td>Secondary special schools</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Vocational / technical</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Diploma colleges</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Universities (integrated)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Primary teachers colleges</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>926</td>
<td>1,304</td>
<td>1,579</td>
</tr>
</tbody>
</table>

Source: Ministry of Education (2009)


Koech report (GoK, 1999), said that children receiving special education have educational handicaps such as physical hearing, visual, mental, emotional, language-learning disabilities, multiple handicaps as well as gifted and talented children.

The researcher, in reference to Ndurumo (1993) and GoK (1999) will base the study on five categories of children with special needs. They include; hearing impaired children, visually impaired children, mentally handicapped children, physically handicapped children and children with multiple handicaps.
1.2 Statement of the problem

Despite the Kenyan government's efforts to provide basic education to all primary school age children together with NGO's, religious bodies and donor funding, enrolment rates and educational attainment of children with disabilities lag far behind those of their non-disabled peers. (GoK, 2006). Therefore there is a need to determine the factors which make learners with disabilities not to access education like their non-disabled peers.

The Ministry of Education statistics (2009), shows that primary schools Net Enrolment Rate (NER) has improved from 77.3 percent in 2002 to 92.5 percent in 2008. The reported NER indicates that 595,095 children are out of school. This is 7.5 percent of primary school going age population. However according to the Government of Kenya (2006), policy overview paper, out of a total population of 750,000 children with special needs who are of school going age, only 90,000 have been assessed to establish the nature of their special needs. Out of this number about 26,885 are enrolled in educational programmes. This implies that over 90 percent of children with special needs are at home.

The government of Kenya sessional paper No 1 (2005) says that the main challenges relating to access and equity in the provision of education and training to children with special needs include; lack of clear guidelines on the implementation of an inclusive education policy, lack of data on children with special needs and inadequate tools and skills in identification and assessment.
1.3 Purpose of the study
The main purpose of the study was to identify the factors affecting access and retention of children with special needs in selected primary schools in Nairobi province. According to the Ministry of Education (2009), there is no proper data given on access and retention of learners with special needs between years 2003 - 2010, this is evident as shown in table 2.1 and appendix IV. The data provided does not give a clear picture to access and retention over the years mentioned.

1.4 Objectives of the study
The study was based on the following objectives;

i) To analyze the trend in access and retention of children with special needs in selected primary schools in Nairobi during the period 2003 - 2010.

ii) To assess both the school based and home based factors affecting access of children with special needs.

iii) To determine the factors affecting retention of children with special needs.

1.5 Research Questions
The researcher aimed at answering the following questions;

i. What is the trend in access and retention of children with special needs in selected primary schools in period 2003 - 2010?

ii. Which are the school based and home based factors affecting access and retention of children with special needs?

iii. Which are the interventions strategies that can enhance access and retention of children with special needs?
1.6 Assumptions of the study
It was assumed that; the respondents gave honest bias-free and accurate information.

The target population was homogenous and the descriptive on the factors affecting access and retention of children with special needs was going to be used by the Ministry of Education to improve on the access and retention of children with special needs.

1.7 Limitations of the study
The study was conducted only in one province, Nairobi. The study would have given a clear picture if research would have involved all special schools/units in Kenya. However, it was not possible due to financial constraints and other logistics such as time accessibility.

1.8 Delimitations of the study
The study was confined to children with special needs in public special schools and units in Nairobi province which received the government funding under the special needs education funding. The study was also confined to the use of a research questionnaire which tested factors affecting access and retention of children with special needs.

1.9 Significance of the study
The significance of the study was that, by attempting to unravel factors which continued to cause low access to special schools/units and high wastage rates among learners with special needs in Nairobi province, useful strategies were formulated to resolve these problems by the government and other stakeholders. The researcher hopes that the study would help education officials both at the National, Provincial and District level who are
concerned with policy making and planning to formulate policies that will help solve problems of low access and retention of learners with special needs.

1.10 Theoretical framework

The study was based on the classical liberal theory of equal opportunity and social Darwinism cited in (Orodho, 2008) which asserts that each person is born with a given amount of capacity, which to a large extent is inherited and cannot be substantially changed. Thus, Educational Systems should be designed so as to remove barriers for any nature (economic, gender, geographic) that prevent bright students from lower economic backgrounds from taking advantage of inborn talents, which accelerate them to social promotion. Social Darwinism emphasizes that every citizen should be given through education the social status to which he / she entitles him/her to inherited aptitude (Kirk, 1972).

Schematically, the social Darwinism theory observes that provision of formal equity of access to education is by putting everybody on the scratch which guarantees that the ensuring run is a just one. Classical liberal Theory has its roots in Rousseau (1712 -1778), who claimed that the natural statements were born equal and personal qualities should not jeopardize social equality and the social opportunity of education. This view is further supported by the American educator Horace Mann (1796 -1889), who called Education the “great equalizer.” Evidence in favour of this is mainly in the form of case studies where examples of people from poor families have taken advantage of education opportunities and proceeded to obtain better jobs and higher incomes than they would have otherwise done. There is a wide spread belief that by removing economic barriers and physical barriers and thus improving on the infrastructure as part of the Kenya
Education Sector Support Programme (KESSP) strategy, more children with special needs will be able to access education (Ministry of Education, 2009).

1.11 Conceptual framework
The central thrust of this study was to investigate factors affecting access and retention of children with special needs in primary schools. The study was based on the conceptual model of school learning that was adapted and modified from (GoK, 1999). The model emphasizes equal rights to education irrespective of age, sex, ethnic, socio-economic and regional origins.

Existing surveys indicate that under the Kenyan government cost sharing, policy, household are struggling to meet the cost of education for their children (Odada & Odhiambo, 1989). A survey by Karugu (1995), further indicates that households are supposed to meet 95 percent of school recurrent expenditure. High dropout rates have been found to be due to school fees and levies. The parents are expected to provide school uniforms, bags and other learning materials. This affects enrolment, retention and completion rates thus creating under development for the nation, (Karugu, 1995).
### Independent variables

**Figure 1.1: Factors affecting access and retention of children with special needs.**

The independent variables are the home based factors which include the socio-cultural factors, family background, parental literacy and attitudes. The school based factors include the school resources, learning opportunities, teacher attitudes and pupil attributes. Both the home based and school based factors lead to the dependent variable which is the...
access and retention. If this is achieved, there will be high enrolment and retention rates in special schools and units, increase in graduation rates as well as in transition rates.

1.12 Operational Definition of Terms
Access – Refers to the aspect of children having ability to reach, attend and utilize conveniently school facilities and services in order to learn.

Children with special Needs – Refers to children who deviate from the average or "normal" child in mental, social, sensory, neuromuscular and physical characteristics. They require to an extent the modification of school practices or special education services in order to develop to their maximum capacities.

Completion rates – Refers to the number of learners who manage to stay consistently in school to learn so as to finish the primary education cycle.

Cost sharing – Refers to partnership and shared responsibilities among the government, Parents and communities in the education in Kenya.

Drop out – Means ceasing to attend school to learn and engaging in other activities outside the school before completing the primary school cycle.

Enrollment rates – Refers to all the learners registered in a particular grade or level in schools.

Inclusion – Children who are perceived different because of their impairment fully and equally participate in and contribute to their community and their culture.

Inclusive Education – This refers to schools, centres of learning and education systems that are open to all children.

Literacy – Means the possessions of basic knowledge and skills that would enable one to read and write.
Regular School – This is a school for non handicapped children (normal learners)

Retention – Means to remain in school consistently in order to learn and complete the primary school cycle successfully.

Special Needs – This is a general and rather controversial term for children who need some form of extra help and assistance.

Special Needs Education – This is individually designed instructional service to meet the unique educational needs of disabled or handicapped persons.

Special schools / units – These are schools or units within a regular school meant for those children with learning problems for example visual problems, hearing problems, mental retardation, physical problems e.t.c.

Wastage rates – Refers to the total number of learners who after enrolment fail to finish schooling at the stipulated length or period of the primary school level.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction
This chapter reviewed related literature on access and retention as well as on the factors affecting access and retention of children with special needs.

The literature to this study was reviewed under four major sections. The importance of education, factors affecting access to education, under which the researcher is looking at socio—Economic factors, school based, socio cultural and lastly political factors.

2.2 Importance of Education
Education represents both consumption and investment. It is valued for its immediate benefits. Education helps to create income in the future by providing educated individuals with skills and knowledge that enable them to increase their productive capacities and thus receive higher earnings. Education also helps individuals to cope intelligently in the first changing society (World Bank, 1995).

Psacharopulos & Woodhall (1985), says that education is universally accepted as a form of investment in human capital that yields Economic benefits and contributes to a country’s future wealth by increasing the productive capacity of its people. Developing countries realize faster growth of Gross National Product (GNP), high family incomes, improved participation in wage employment and higher productivity as economic advantages arising out of educating children (King & Anne Hill, 1993), educate all citizens not only because Education is a basic right but also because of its benefits to
families and society as a whole. This makes it imperative for Governments and all concerned to ensure that the citizens get maximum benefit from education.

According to Republic of Kenya, Economic survey, (2003) the Kenyan Government parents and their sponsors have made commendable efforts to fund education to all levels. This is attested to in part by the fact that since the 1970's educations strive of the government spending on social services has remained close to 60%.

The government’s expenditure on education has increased from Ksh 72.29 billion 2003 to Ksh 114.36 billion in 2007. The ratio of recurrent expenditure on education in 2003 / 2004 was 94.36 percent and has marginally declined to 93.08 percent (Education statistics 2003 - 2007).

It is therefore evident that education is one of the critical factors which contribute positively to national economic and social development. This fact is recognized in Kenya, existing financial difficulties and more so at the special schools / units and as a result many children fail to access education at the basic level. It is important to give special attention to the financing of education in special schools / units if national development is to be realized.
2.3 Increasing accessibility of education

In order to increase access and improve quality, the Government through the sessional paper No. 1 (2005) will: Rehabilitate and strengthen the assessment programme in order to facilitate identification and placement of learners with special needs; integrate special education programmes in all learning and training institutions and ensure that the institutions are responsive to the education of learners with special needs; collaborate with and co-ordinate other providers of special education; provide instructional materials through the waving of duty on specialized equipment and materials as well as provide equipment as a way of reducing the cost of providing special needs education; develop a national policy that comprehensively defines areas of all special needs, and the specific needs identified.

According to GoK (2005) the government has promised to employ the following strategies so as to improve access and retention of children with special needs. These include: develop a programme to create public awareness on the need to send children with special needs for early assessment and placement. Design and implement programmes that enhance inclusive education in all institutions; promote innovations in local enterprises and inculcate skills for production of equipment and learning materials for special needs education, promote access to primary, secondary, tertiary and university education by learners with special needs through affirmative action and implement integrated special education programmes in pre-service and in service teacher training as well as strengthening institutions supporting special needs education for example, Kenya Institute of Special Education (KISE).


2.4 Enrolment in Special Needs Institutions

According to the Ministry of Education (2009) the enrolment of special needs learners at various levels of education has increased from 84,650 in 2002 to 221,995 in 2008.

Table 2.1 Enrolment in Special Needs Education Institutions by category, 2002 – 2008

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
<td>Total</td>
<td>Boys</td>
</tr>
<tr>
<td>Special primary</td>
<td>7290</td>
<td>5221</td>
<td>12511</td>
<td>7863</td>
</tr>
<tr>
<td>Special secondary</td>
<td>3608</td>
<td>256</td>
<td>3864</td>
<td>3822</td>
</tr>
<tr>
<td>Special tech/Voc</td>
<td>642</td>
<td>527</td>
<td>1169</td>
<td>757</td>
</tr>
<tr>
<td>Primary units/inter</td>
<td>27829</td>
<td>39277</td>
<td>67106</td>
<td>31276</td>
</tr>
<tr>
<td>Total</td>
<td>39369</td>
<td>45281</td>
<td>84650</td>
<td>43718</td>
</tr>
</tbody>
</table>

Source: Ministry of Education (2009)

The Ministry of Education (2009) in the National Special Needs Education policy framework states clearly that there are no proper records to show retention of learners with special needs per class up to the end of primary education. This is evident in the Education facts and figures 2002 – 2008 (Ministry of Education 2009). Unlike in regular schools where one can easily follow the retention figures from one class to another, as for the learners with special needs it’s not clearly stated. This is the more reason as to why this study needs to be carried out.
When we look at the Ministry of Education (2009), statistical booklet of Education facts and figures on the Number of special needs institutions by province and specialty 2008, the number of institutions in Nairobi is contrary to what the city Education (2009) provides.

Table 2.2 Number of Special Needs Institutions by province and Specialty, 2008

<table>
<thead>
<tr>
<th>Province</th>
<th>Mentally impaired</th>
<th>Physically impaired</th>
<th>Visually impaired</th>
<th>Hearing impairment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CENTRAL</td>
<td>04</td>
<td>03</td>
<td>02</td>
<td>08</td>
<td>17</td>
</tr>
<tr>
<td>COAST</td>
<td>04</td>
<td>02</td>
<td>01</td>
<td>05</td>
<td>12</td>
</tr>
<tr>
<td>EASTERN</td>
<td>07</td>
<td>01</td>
<td>02</td>
<td>05</td>
<td>15</td>
</tr>
<tr>
<td>NAIROBI</td>
<td>09</td>
<td>-</td>
<td>-</td>
<td>01</td>
<td>10</td>
</tr>
<tr>
<td>N. EASTERN</td>
<td>01</td>
<td>01</td>
<td>-</td>
<td>02</td>
<td>04</td>
</tr>
<tr>
<td>NYANZA</td>
<td>07</td>
<td>02</td>
<td>03</td>
<td>08</td>
<td>20</td>
</tr>
<tr>
<td>R. VALLEY</td>
<td>05</td>
<td>-</td>
<td>-</td>
<td>08</td>
<td>13</td>
</tr>
<tr>
<td>WESTERN</td>
<td>07</td>
<td>03</td>
<td>-</td>
<td>09</td>
<td>19</td>
</tr>
<tr>
<td>TOTAL</td>
<td>44</td>
<td>12</td>
<td>08</td>
<td>45</td>
<td>109</td>
</tr>
</tbody>
</table>

Source: Ministry of Education (2009)

According to the City Education Office (2009), Nairobi province has a total of six (6) special schools and thirty one (31) special units. These schools / units are found within the three districts of Nairobi namely; Nairobi East, Nairobi West and Nairobi North. 22 units are for mentally handicapped children, 5 units for hearing impaired children, 3 units for visually impaired children, 2 units for Autism children and 1 unit for Deaf blind children. From the six special schools we have 5 schools for mentally handicapped
children and 1 school that caters for children with three different impairments namely mental, physical and hearing impairments.

2.5 Factor Affecting Access and retention to Education
For one to enroll in school or a particular program there are several factors which influence access. School participation is an interaction of supply, demand and learning process. Supply refers to both the availability and quality of school facilities, materials and teachers. Demand on the other hand is based on decisions that parents make concerning the opportunity of schooling and the influence of such factors. Access to education is determined by several factors namely: socio-economic factors, school based factors, socio-cultural factors and political factors.

2.5.1 Socio - Economic Factors
DFID (1998) cited that socio-economic factors are the most influential in adversely affecting the education if children with special needs. Other factors identified are socio-cultural, religious, health and legal factors.

Lockheed and Verspoor (1991) argue that children from poor families are less apt to enroll in school. He attributes this to child labour in order to provide for the family, lack of finances and malnourishment. Graham Brown (1991:51) points out that:

Educational provision is limited by lack of funds, so the poorest and the most marginal people are least likely to access education. Poor quality education also limits the numbers who reach the higher grade. Thus effective education remains largely the preserve of the elite.
Most of the low income families are also in constant movement in search of jobs and this affects education of their children as it leads to frequent repetitions and erratic attendance. This has even more impact on the disabled children since with limited finances from some communities, an able child would be educated and the child with special needs is left at home.

2.5.2 School - based Factors
A study conducted by DFID (2005), identified the cost of schooling and poor school environment as the challenges facing access of children with special needs. The quality of education offered at primary and secondary levels will determine the performance of a student during the final exams. Provision and efficient use of physical facilities, textbooks, teaching materials and the qualification of teachers determine the quality of education (Birdsall et al 2006).

Bedi et al (2004), argued that the transition from primary to secondary also determines access. The period of time spent to enter these institutions could lead to drop out. This view is further supported by policy overview paper (2006), which says that over 90% of children with special needs are at home. An average these children go to school when they are 8 years and above. Consequently they become adults before they complete their educational programmes.

Distance from home to school is also another factor that determines access (Lockheed 1991; Graham – Brown, 1991). This could be due to difficulty or expense of transport especially to those in rural areas, females and the physically handicapped. Obura (1991),
says that text books contributed to reinforcing the hidden curriculum that is bound to influence negatively on a disabled child’s attributes towards educational achievements. Text books have cognitive and effective effects in that they shape teaching and learning. He further found out that the images of children with disabilities are considerably fewer in number than that of able children, that is children without disabilities. It is important to sue text books to facilitate formation of positive images in all learners (Obura, 1991).

2.5.3. Parents Level of Education

Parent's level of education has a positive and significant impact on the probability of enrolment. The level of mothers education exerts a particularly strong influence on the likelihood of girls enrolling in school and with high illiteracy rates and ignorance, majority of the pastoral community have limited awareness on the importance and value of education and the existing opportunities it follows that they do not demand for education of their children and more so children with special needs.

Parent’s level of education and nature of their occupation has an impact on a child with disabilities education career and professional advancement. Parents who have attained high formal education appreciate education for their children regardless of their gender and disabilities (UNICEF, 1999; UNESCO, 1987).

Leal Gitele (2002), in his study notes that there is a significant relationship between the mother’s level of education and their children’s educational aspirations. For the mothers who had attained a high educational level, their children’s educational aspirations are
high. The economic status of the parents determines female education participation and aspiration for higher education.

Bedi et al (2004), pointed out that, in Kenya, attending school had both direct and indirect costs. Such costs lower the resources available for household consumption. Consequently, a household had to make a choice between benefits that accrue to education, including externalities and household consumption foregone.

2.3.4 Political factors

DFID (1998), argued that government policies exist for example universal primary education and equal educational opportunities in terms of gender but the political will to carry these through seems to be weak in terms of severe economic constraints.

Graham – Brown (1991:55), argued that government policies determine the attitude people have to education. Graham – Brown notes that:

A government which actively encourages and prioritizes education not only for the elite.... May legitimize education for those who previously thought it was not for them or their families... government policies provoke skepticism about education if it is perceived as irrelevant people's needs and of poor quality; if its benefits are seen to be reserved for those who are already privileged; if it is deliberately segregated along class or racial / ethnic lines or lastly if the wider economy cannot offer some economic and social rewards to its graduates.
Government policies would help influence people's perception on the importance and benefits of educating children with disabilities. Hence political factors will determine whether people will see the benefits of educating children with disabilities and hence would influence their demand and hence access.

2.6 Summary
The literature review showed that despite the fact that education is of vital importance to an individual as well as to the society, the number of learners with special needs accessing education are still and cannot be compared with the number of learners without special needs who access education. The MOE (2009), states that in 1999 there were only 22,000 learners with special needs and disabilities enrolled in special schools, units and integrated programmes. This number rose to 26,885 in 2003 and to 45,000 in 2008, which still compares poorly with the proportion in general education.

The same literature also revealed that even the Ministry of Education has no clear data on learners with special needs as it has for learners without disabilities. In the Ministry of Education (2009), Education facts and figures booklet, data on primary schools enrolment by province 2002-2008, Gross Enrolment by province 2003-2008, Enrolment by gender transition rate from primary to secondary schools 2002-2008 as well as data on primary schools completion rate 2002 to 2008, has been provided. This is however not the case for learners with special needs.
Ministry of Education (2009), has only provided data on enrolment in special Needs Education Institutions by category 2002 – 2008, (Refer to table 2.1) and enrolment in Special Schools by type of impairment 2003 and 2007, (Refer to appendix IV). This is a clear indication that there is no proper data on enrolment and retention of learners with special needs as well as transition rates from primary to secondary schools.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction
This chapter gives a description of procedures that were used in carrying out the study. It focused on research design, location of the study target population and sampling technique, research instruments, piloting procedures, data collection and data analysis techniques.

3.2 Research design
The study adopted descriptive survey design to find out the factors affecting access and retention of children with special needs in selected primary schools in Nairobi. This design was appropriate because it aimed at gathering facts, knowledge opinions and attitudes about people, events or procedures. According to Gay (1992), descriptive method of research is a process of collecting data in order to test hypothesis or answer questions concerning the current status of the subject in the study. Such a method of study determines and reports the way things are. Orodho (2009), says that the descriptive approach in research deals with the incidence distribution and interrelations of educational variables. He says that its purpose is to describe the nature of existing conditions, to identify the standards against which conditions can be compared and also to determine the relationship that exist between specific events. Lokesh (1984) said descriptive research is designed to obtain pertinent and precise information concerning the current status of phenomenon and wherever possible to draw valid general conclusions from the facts discovered.
Descriptive survey research according to Borg & Gall (1989) in Orodho (2009), is intended to produce statistical information about aspects of education that interest policy makers and educators. Survey design is used to explain or explore existing status of two or more variables at a given point in time (Mugenda & Mugenda, 1999).

3.3 Location of the study
The location of the study was Nairobi province. The province has three districts namely; Nairobi East, Nairobi West and Nairobi North. Nairobi province has a total of six (6) special schools and thirty one (31) special units (City Education Office, 2009). (Refer to Appendix V) Nairobi is therefore said to be having the highest number of special schools / units hence the highest number of special education teachers (Ministry of Education Statistics, 2009), thus provides a substantial target population as compared to other provinces in Kenya.

3.4 Target population
The study targeted 980 parents of learners with special needs from the special schools / units in Nairobi, 37 headteachers and 103 teachers who teach in these special schools / units in Nairobi.

3.5 Sample and sampling techniques
According to Gay (1992), a researcher selects a sample due to limitations that may not allow researching the whole population. Subbarao & Raney (1992), observed that due to limitations in time, funds and energy, a study can be carried out from a carefully selected sample to represent the entire population. Mugenda & Mugenda (1999), noted that, resources and time tend to be major constraints in deciding on the sample size to use.
Borg & Gall (1996) suggest that for a survey study, a minimum of one hundred subjects in each group and twenty to fifty subjects in each minor sub group are adequate size to make generalization about the group. The sampled schools had different categories of special needs. The researcher therefore ensured that all the categories of special needs were catered for in the study. (Refer to Appendix IV for details on impairments by category). Out of the 6 special schools in Nairobi 2 schools were involved in the study. This was in regard to Mulusa (1990), who posits that one third of the target population is representative to make estimates of the characteristics being investigated. From 31 special units 10 special units were involved in the study. The schools / units were selected using simple random sampling procedure using a Yes / No option. The sample population of teachers and parents of learners with special needs were drawn from Krejcie & Morgan (1970) table for determining the sample size. The sample size was 108 (17.61%) comprising of 12 (32.43%) headteachers, 32 (31.06%) teachers and 64 (16.88%) parents. The researcher sampled 3 teachers and 5 parents per school.

Krejcie & Morgan (1970: from http://www.coe.unit.edu/allen) indicates how a sample size of research activities is determined depending on the study population. The size of the population and amount of error determines the size of a randomly selected sample. The two scholars’ instituted tables for determining sample sizes which were applied in this study based on the proportions for the population.

Krejcie and Morgan’s Table helps a researcher to determine (with 95% certainty) what the results would be if the entire population is surveyed. Using Krejcie and Morgan the
study sample size was determined (Refer to appendix VI for details on Krejcie and Morgan's sampling Tables)

Table 3.1 summary of the sample size

<table>
<thead>
<tr>
<th>Target population</th>
<th>N</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headteachers</td>
<td>37</td>
<td>12</td>
</tr>
<tr>
<td>Teachers</td>
<td>103</td>
<td>32</td>
</tr>
<tr>
<td>Parents</td>
<td>980</td>
<td>64</td>
</tr>
<tr>
<td>Total</td>
<td>1,120</td>
<td>108</td>
</tr>
</tbody>
</table>

Where N – Population size

n – Sample size

3.6 Research instruments

In order to achieve the objectives of the study, the researcher collected data using questionnaires and interview schedules in all the special schools and units in Nairobi. Questionnaires are widely recommended in education studies to obtain information about current conditions and practices and to make enquiries concerning attitudes and opinions quickly and in a precise form (Gay, 1992). He further notes that questionnaires offers considerable advantages in administration as they present an even stimulus potential to a large number of people simultaneously, and provide the researcher with an easy accumulation of data. The researcher had questionnaires for headteachers and teachers of learners with special needs as well as an interview schedule for parents of children with
special needs in Nairobi. The questionnaires comprised of open ended questions, closed-ended questions and matrix questions which allowed the respondents to provide in depth assessment of the school environment. Some of the items were used to sought respondents views and suggestion on factors affecting access and retention of children with special needs.

3.7 Piloting
A pilot study was conducted to establish the validity and reliability of the instruments, headteachers and teachers questionnaires as well as the parent’s interview schedule. A sample school which was not part of the sample size was used. The researcher administered the questionnaires and the interview schedule personally to the respondents. The researcher collected back the questionnaires for data verifications. After two weeks the researcher issued the same questionnaires (Test – retest) to collect the data for final verification.

3.7.1 Validity of research instruments
Validity is defined as the accuracy and meaningfulness of inferences which are based on the research results (Mugenda & Mugenda, 1999). This means validity is the degree to which results sustained form the analysis of the data actually represents the phenomenon under the study. It is the degree to which a test measures what it purports to measure.

In testing the validity of the research instrument, the questionnaire was administered to the headteachers and teachers of learners with special needs. The researcher applied content validity where the experts’ opinions were soughted.
The interview schedule was administered to the parents of learners with special needs. This investigated the factors which hinder access of learners with special needs to education.

The validity of the parents' interview schedule was determined by two members of Educational Management, Policy and Curriculum Studies department of Kenyatta University competent in the area of study who were requested to validate the contents of the interview schedule for relevance.

3.7.2 Reliability of research instruments
Reliability is the measure of the degree to which a research instrument yields consistent results or data after repeated trial (Mugenda & Mugenda, 1999).

To test the reliability of the instrument, the test – retest technique was employed by the researcher. Under this technique questionnaires were administered twice to the headteachers and teachers in the pilot sample. The researcher revisited the school after two weeks for a second administration (Test – retest). The responses were scored manually. A comparison between the answers was obtained in the two tests and they were made using Spearman’s Coefficient of Correlation formula.

\[
\text{Rho (r_s)} = \left\{ 1 - \frac{6\sum d_i^2}{n(n^2 - 1)} \right\}
\]

Where Rho (r_s) = Spearman’s Coefficient of Correlation

d_i = different between ranks of pairs of the two variables
\( n = \) the number of pairs of observation

A correlation coefficient \((r)\) of 0.832 was worked out and since a \((r)\) of 0.75 should be considered high enough to judge the reliability of the instrument (Orodho, 2009), the research instruments were found reliable.

### 3.8 Data collection

After obtaining the permit from the Ministry of Education and further seeking permission from headteachers to conduct research in their institutions, the researcher administered the questionnaires personally to the headteachers and teachers of learners with special needs. The researcher developed a covering letter explaining the purpose of the study, and attached it to the questionnaires. The respondents were assured of utmost confidentiality. The researcher administered the instruments during morning and afternoon hours. The researcher made various visits to the respective schools / units during the period of data collection which took two weeks. The researcher met the parents of learners with special needs for interview. Each interview took thirty minutes. The entire interview process took two weeks.

### 3.9 Data Analysis

On completion of the data collection process, the researcher checked the completeness of the questionnaires before embarking on compiling and coding the data. The data was then arranged and grouped according to particular research questions. The open ended items in the questionnaires were analyzed qualitatively, while the closed ended and matrix items in the questionnaires were analyzed quantitatively. Quantitative data was tabulated and analyzed using simple frequencies and percentages (Harper, 1998). Data collected from
interviews was analyzed qualitatively. Responses were organized descriptively into themes, coded and presented in discussion, narrative forms and citations.

Data collected was coded and entered in the computer for analysis using Statistical Package for Social Sciences (SPSS). The Statistical Package for Social Sciences (SPSS) is a comprehensive and flexible statistical analysis and data management system (Orodho, 2009).
CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION OF RESULTS

4.1 Introduction
This chapter presents data analysis and discussion of the study findings on the factors affecting access and retention of children with special needs in selected primary schools in Nairobi Province. The study targeted a sample size of 108 comprising 12 head teachers, 32 teachers and 64 parents. The response rates for the three categories were 58.33%, 78.13% and 76.56% respectively.

Table 4.1: Total Respondents

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percent</th>
<th>Expected</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>49</td>
<td>60.5</td>
<td>64</td>
<td>59.26</td>
</tr>
<tr>
<td>Teachers</td>
<td>25</td>
<td>30.9</td>
<td>32</td>
<td>29.63</td>
</tr>
<tr>
<td>Head teachers</td>
<td>7</td>
<td>8.6</td>
<td>12</td>
<td>11.11</td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
<td>100.0</td>
<td>108</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source (Survey Data, 2011)

According to Table 4.1, all the responses are within 2% of targeted stratum sizes with the exception of Head teachers who were within the 5% range.

4.2 Demographic Information
The age structure and academic qualifications for teachers, head teachers and parents are presented in the sample are presented in Tables 4.2 and 4.3. Of the teaching staff sampled 59.4% are in the 46-55 year age group while 40.6% fall under the 26-35 year age group.
A majority of the staff 65.6% indicated having attained University level of education while only 15.6% indicated their level of education as being secondary school level. For professional qualifications, 46.9% hold Bachelors in Education, Special Education, 21.9% possess a Diploma in Special education while 9.4% possess Masters in Education.

Majority of those sampled (50%) have a teaching experience of 11-20 years with about 4-10 years teaching Special Needs learners.

Table 4.2: Demographic Characteristics, Teaching Staff

<table>
<thead>
<tr>
<th>Age group</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>26-35 years</td>
<td>13</td>
<td>40.6</td>
</tr>
<tr>
<td>46-55 years</td>
<td>19</td>
<td>59.4</td>
</tr>
<tr>
<td>Level of Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>5</td>
<td>15.6</td>
</tr>
<tr>
<td>University</td>
<td>21</td>
<td>65.6</td>
</tr>
<tr>
<td>Others</td>
<td>6</td>
<td>18.8</td>
</tr>
<tr>
<td>Professional Qualification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma (KISE)</td>
<td>7</td>
<td>21.9</td>
</tr>
<tr>
<td>Post Graduate Education</td>
<td>1</td>
<td>3.1</td>
</tr>
<tr>
<td>B.ED (Special)</td>
<td>15</td>
<td>46.9</td>
</tr>
<tr>
<td>M.ED</td>
<td>3</td>
<td>9.4</td>
</tr>
<tr>
<td>Others</td>
<td>6</td>
<td>18.8</td>
</tr>
<tr>
<td>Teaching experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-20 years</td>
<td>16</td>
<td>50.0</td>
</tr>
<tr>
<td>21-30 years</td>
<td>9</td>
<td>28.1</td>
</tr>
<tr>
<td>Years of experience in SNE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-3 years</td>
<td>6</td>
<td>18.8</td>
</tr>
<tr>
<td>4-10 years</td>
<td>21</td>
<td>65.6</td>
</tr>
<tr>
<td>16-20 years</td>
<td>5</td>
<td>15.6</td>
</tr>
</tbody>
</table>

Source (Survey Data, 2011)
Parents of children with disabilities have an almost uniform distribution across the age groups as follows: 21-30 years 26.5%, 31-40 years 36.7%, 41-50 years 6.1% and 51-60 years 30.6%.

Over 60% of the parents are married and possess at least a secondary school level of education, where by 38.8% of the parents are employed while 24.5% are in business.

Table 4.3: Demographic Characteristics, Parents

<table>
<thead>
<tr>
<th>Age group</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-30</td>
<td>13</td>
<td>26.5</td>
</tr>
<tr>
<td>31-40</td>
<td>18</td>
<td>36.7</td>
</tr>
<tr>
<td>41-50</td>
<td>3</td>
<td>6.1</td>
</tr>
<tr>
<td>51-60</td>
<td>15</td>
<td>30.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>30</td>
<td>61.2</td>
</tr>
<tr>
<td>Widowed</td>
<td>5</td>
<td>10.2</td>
</tr>
<tr>
<td>Divorced</td>
<td>14</td>
<td>28.6</td>
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</table>

<table>
<thead>
<tr>
<th>Education level</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>5</td>
<td>10.2</td>
</tr>
<tr>
<td>Secondary</td>
<td>31</td>
<td>63.3</td>
</tr>
<tr>
<td>College</td>
<td>13</td>
<td>26.5</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>12</td>
<td>24.5</td>
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<tr>
<td>Driver</td>
<td>5</td>
<td>10.2</td>
</tr>
<tr>
<td>Employed</td>
<td>19</td>
<td>38.8</td>
</tr>
<tr>
<td>Farmer</td>
<td>6</td>
<td>12.2</td>
</tr>
<tr>
<td>Self Employed</td>
<td>7</td>
<td>14.3</td>
</tr>
</tbody>
</table>

Source (Survey data, 2011)
4.3 Trend in Access and Retention of Children in Special Needs

The first objective of this study was to identify and analyze the trend in the access and retention of children with special needs in selected primary schools within Nairobi between 2003 and 2010. Of the schools sampled, none of the schools provided data for the year 2003. From Fig. 1, enrollment for both boys and girls was highest in the year 2004. The lowest levels of enrollment were recorded in the year 2007.

Fig 4.1 Enrollment for Boys and Girls from 2003 to 2010

Fig 4.2 shows a 3-point moving average trend line over the period 2003 to 2010. The average enrollment rate dropped steadily from 2004 to 2008. It is noted that Free Primary Education was introduced in 2003. None of the schools sampled provided enrollment figures for the year 2003. Lack of data in the year 2003 in all the sampled schools concurred with the literature review, Ministry of Education (2009) in the National Special Needs Education Policy framework which clearly stated that there was no proper data
records to show access and retention of learners with special needs. The study further revealed that all the schools sampled were in existence in the year 2003.

Figure 4.2 explains the enrollment trend for children with special needs between year 2003 and 2010. The study revealed that more boys with special needs access school compared with the girls with special needs. This difference was attributed to some school based and home based factors which are discussed in the later pages. However the number of girls with special needs who accessed school was at it’s highest in 2004. By year 2007, the enrollment trend had really declined. However the enrollment trend for the girls increased in year 2008 and in the year 2009 respectively. For the boys with special needs the enrolment trend was at it’s highest in 2004. The research revealed a decline in the enrollment of boys in 2006. In the year 2007, the study revealed an increase in the enrollment trend for boys with special needs, a minimal drop in 2008 and an increase in 2009 respectively.

![Graph showing the enrollment trend for children with special needs between 2003 and 2010. Red line represents boys and blue line represents girls.](image)

Source (Survey Data, 2011)

**Fig 4.2 General Enrollment Trend for Children with Special Needs: 2003 to 2010**
4.4 School and Home Based Factors that affect Access to Education for Children with Special Needs

The second objective evaluates the factors as perceived by the heads of special needs institutions, teachers and parents that affect access to education by children with special needs. Fig 4.3 shows the level of access to education for children with special needs. 43% of the respondents feel that children with special needs can access education. However, 57% indicated that children with special needs cannot access education or have limited access to education. This has been attributed to so many factors which are either school based or home or home based factors.

Source (Survey Data, 2011)
Fig 4.3 Access to Education by Students with Special Needs
4.4.1 School Based Factors

a) Funding of SNE

Fig 4.4 indicates that the Government allocates funds for Special Needs Education according to a majority (68.8%) of teaching staff. However, 62.5% of the respondents feel that the funds allocated for Special Needs education are not sufficient (Fig 4.4).

![Graph showing government funding for special education]

Source (Survey Data, 2011)

**Fig 4.4 Government Funding for Special Education**

The teacher respondents 68.8% agreed that the government funds special education. However 28.1% of the teacher respondents were not sure whether the government funds special education or not. The study found that there is no proper communication towards the funding received. Some respondents further added that funds received in their respective schools was not put in proper use. This is because no headteacher involved them in the budgeting. Majority of the parents 78% were also not sure whether the government funds special education or not. This is because they are the ones who
purchase learning equipments like the hearing aids for these children or they depend on well wishers who donate the equipments to the schools.

Source (Survey Data, 2011)

Fig 4.5 Sufficiency of Government funds Allocated to Special Education

Though the government funds special education as revealed by the study, only 34.4% of the respondents agreed that the funds was sufficient. 62.5% of the respondents said that the funds allocated to special education was not sufficient. The respondents agreed that special needs learning equipments like the braille machines, hearing aids, wheelchairs and the calipers were too costly. Most special schools are in dire need of these equipments according to the study, but it’s unfortunate to say that they are not able to purchase them. The parents too feel that the government does not support them fully in the purchase of the learning equipments.
Some respondents felt that there is a lot of misappropriation of funds and this is what causes the problem. The respondents further added that the government was well informed about the situation in these special schools but it was doing very little.

b) Utilization of Government Resources Allocated to SNE

Fig 4.6 illustrates the uses of the Government resources allocated to Special schools or regular schools with a Special Education unit.

Source (Survey Data, 2011)
Figure 4.6: Utilization of Government Resources Allocated to Special Education

Purchase of special equipment/aids and learning materials account for 78% of the resources allocated. Teaching aids and furniture account for 9% and 13% of the resources respectively. The study found that this is so because most special schools are in need of the equipments. Most parents of children with special needs are not able to buy the equipments and the aids like the braille machines and the hearing aids due to the cost implications.
According to the study, another reason as to why equipments/aids and the learning materials like the hearing aids took a bigger portion was because these aids needed replacement oftenly. This was due to mishandling by the students themselves.

**Table 4.4: Cross-tabulation of the Extent of Involvement in Decision Making and Areas to be prioritized**

<table>
<thead>
<tr>
<th>Involvement in decision making</th>
<th>Priority areas</th>
<th>Not at all</th>
<th>Partly involved</th>
<th>Fully involved</th>
<th>Source (Survey Data, 2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Teaching/ instructional materials e.g. braille</td>
<td>14.3</td>
<td>10.7</td>
<td>10.7</td>
<td>35.7</td>
</tr>
<tr>
<td></td>
<td>Proper training of staff</td>
<td>.0</td>
<td>3.6</td>
<td>5.4</td>
<td>8.9</td>
</tr>
<tr>
<td></td>
<td>Hire additional trained staff</td>
<td>.0</td>
<td>5.4</td>
<td>7.1</td>
<td>12.5</td>
</tr>
<tr>
<td></td>
<td>Create awareness in community</td>
<td>5.4</td>
<td>3.6</td>
<td>8.9</td>
<td>17.9</td>
</tr>
<tr>
<td></td>
<td>Provide co-curricular amenities</td>
<td>.0</td>
<td>.0</td>
<td>5.4</td>
<td>5.4</td>
</tr>
<tr>
<td></td>
<td>Provide sanitary facilities</td>
<td>1.8</td>
<td>3.6</td>
<td>8.9</td>
<td>14.3</td>
</tr>
<tr>
<td></td>
<td>Availability of learning materials and equipments</td>
<td>.0</td>
<td>3.6</td>
<td>1.8</td>
<td>5.4</td>
</tr>
</tbody>
</table>

Table 4.4 indicates that among the respondents who are either teachers or head teachers in institutions offering special education, 14.3% of those not involved in decision making feel that provision of teaching materials/ instructional materials like braille should be given priority. Overall, 35.7% of respondents indicated that teaching/ instructional material should be prioritized. Other areas to be prioritised include creating awareness about importance of special education 17.9%, provision of sanitary facilities 14.3%, hire
additional trained staff 12.5%, further training of teachers in SNE 8.9% and provision of co-curricular amenities 5.4%.

4.4.2 Home Based Factors
a) Parent Level of Education

Fig 4.7 represents the parent’s perception of the importance of special education based on their level of education.

According to Figure 4.7, 49% of parents perceive special education as being very helpful to their children; 26.5% of these parents are college educated while 12.2% possess secondary school level of education and 10.2% are illiterate. Further, 51% of the parents reported that special education is either moderately helpful or fairly helpful to their children. These parents possess secondary level of education.
b) Cost of Educating a Child with Special Needs

According to the parents, 65.3% stated that it costs more to educate a special child compared to the cost of education of a normal child. This was attributed to so many factors which were not the case with learners in regular schools. Children with special needs needed special attention, proper meals as well as learning equipments and aids like the braille machines, hearing aids, wheelchairs and calipers which were very expensive for parents to afford.

Source (Survey Data, 2011)

Fig 4.8 Cost of Educating a Child with Special Needs
From the sample, 24.5% of the parents indicated transport costs are part of the additional costs involved in educating a special child. Cost of medication for some conditions was also cited as being a major contributor to additional costs by 16.3% of the respondents. Miscellaneous costs like buying of bibs and calipers were cited by 12.2% of the respondents. Other costs mentioned include: purchase of equipments/aids, 10.2% and meals, 6.1%.

Source (Survey Data, 2011)

Figure 4.9: Costs Involved
c) Other Factors

Other factors identified as affecting access to education of children with special needs are presented in Fig 4.10.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative attitude by regular teachers</td>
<td>17.6%</td>
</tr>
<tr>
<td>Distance to learning facilities</td>
<td>12.9%</td>
</tr>
<tr>
<td>Parents embarrassment/ frustrations/ fear of stigmatization</td>
<td>17.6%</td>
</tr>
<tr>
<td>Parents denial</td>
<td>8.2%</td>
</tr>
<tr>
<td>Parents not sensitized/ aware</td>
<td>14.1%</td>
</tr>
</tbody>
</table>

Source (Survey Data, 2010)

Figure 4.10: Other Factors Affecting Access to Education

The figure shows that negative attitude by regular teachers, 17.6% distance to learning facilities, 12.9% parents lack of awareness on importance of special education, 14.1% stigmatization and embarrassment, 17.6% and denial by parents 8.2% were identified as factors that affect access to education for children with special needs.

4.5 Factors affecting Retention of Children with Special Needs

The third objective was to assess factors affecting retention of children with special needs in schools. To assess the factors, teaching staff respondents were asked to indicated measures instituted in their schools to ensure children with special needs are retained in
schools. Suggestions were also sought on how best to improve access and retention. Fig 4.11 shows the measures instituted by various schools while Fig 4.12 provides suggestions to Government on ways to improve access and ensure retention.

![Bar chart showing measures put in place by schools to retain students.

Source (Survey Data, 2011)

Fig 4.11 Measures put in Place by Schools to Retain Students

Fig 4.11 shows that 20.4% of the schools sampled offer free meals as an incentive to ensure children with special needs continue attending classes. 16.4% of the schools have entered into partnerships with donors and non-governmental organizations to ease the cost burden on parents. Other measures include: sensitizing the community on the need for special education 15.5%, integrating other co-curricular activities into the learning program 14.6%, free transport, 11.7% and offering counseling to the parents to enable them deal with stigma, 8.7%.
The responses from 25.8% of the sample population proposed that Government should concentrate on creating community awareness. 21.2% indicated that more centers for special education should be established across the country. Alternative means of evaluation for children with disabilities and provision of special equipment each had 18.2%. Provision of boarding facilities was also among the key suggestion with 16.7% of the sample responses. The respondents agreed that most children with disabilities do not access school due to transport issues. Most of the schools for different categories of special needs were located in areas not accessible to all. This prompted parents to look for transport to take their children to school. Majority of the parents find it very difficult and very expensive since they have other children to look after. The government is therefore
urged to ensure that a school for each category of disability is found within each district namely Nairobi East, Nairobi West and Nairobi North. This will make the parents have no reason to withdraw their children from school and thus more children with special needs will be able to access and be retained in schools.

In situations where it will not be possible to start a school for a particular disability, the government should then provide transport for these children. Unlike regular schools which are found in every neighbourhood, the situation is different with special schools. This is the more reason as to why the researcher feels that the government should provide transport to far schools.

The government should also create awareness on the importance of education to children with disabilities. This is because some parents felt that children with disabilities gained very little with education. Majority of the parents respondents felt that education had very little impact in the lives of their children with disabilities if any. This was the reason as to why the parents did not care so much about the issue of their children accessing school or even ensuring that they are retained in schools.
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction
The purpose of the study was to investigate the factors affecting access and retention of children with special needs in primary schools in Nairobi. This chapter contains two sections, a summary of the main findings of the study and recommendations based on the findings. Areas for further research are also suggested.

The main objectives of the study were:

i) To analyze the trend in access and retention of children with special needs in selected primary schools in Nairobi during the period 2003 – 2010.

ii) To assess both the school based and home based factors to access of children with special needs.

iii) To assess the factors to retention of children with special needs.

The study adopted a descriptive survey design. A sample of 12 special schools / units was taken for the study whereby 2 were special schools while 10 were special units. The number of headteachers were 12, 32 teachers and 64 parents of children with special needs were selected. From each school a sample of teachers teaching learners with special needs were randomly selected, and so were the parents. The headteachers questionnaire, teachers questionnaire and parents interview schedule were the main instruments used in the study.
Information on admission records was collected through document analysis while information on factors affecting access and retention and possible intervention strategies was collected using questionnaires and interview schedule.

Secondary data on student admissions statistics were subjected to statistical analysis and presented in the form of graphs and percentages. Primary data was analyzed and presented in narrative and discussion form.

5.2 **Summary of research findings**

Though enrolment of learners with special needs is considerably low compared to that of their counterparts, that is children without disabilities as reflected in the literature review, the study found out that on average enrolment of children with disabilities has increased. However, there is still a notable persistent trend of more boys with special needs being enrolled in school than girls. On average the enrolment for boys with special needs was 63% while that of the girls was 37% respectively. The study further revealed that enrolment for both boys and girls with special needs was highest in the year 2004.

The study revealed that most schools that were sampled lacked proper data from 2003 despite most of these schools being in existence long before year 2003. These findings were in agreement with the findings in the literature review.

Access and retention of learners with special needs is highly affected by the school based factors. Some of the school based factors included, funding of the special needs
education. Though 68.8% of the teachers agreed that the government allocates funds for special Needs Education, 62.5% of the same respondents feel that the funds allocated is not sufficient. However 28.1% of the respondents were not sure whether the government allocates funding to Special Needs Education or not. Barely half of the respondents 34.4% were of the opinion that the funds are enough. The study further revealed that 78% of the resources allocated are for the purchase of special equipments and learning materials. Teaching aids and furniture accounted for 9% and 13% respectively. In this regard 14.3% of the respondents felt that they were not involved in decision making. Overall 35.7% of the respondents indicated that teaching / instructional materials should be prioritized. Other areas to be prioritized included creating awareness about the importance of special education which was supported by 17.9% of the respondents.

Parents level of education was seen as one of the home based factor which highly affects access and retention of learners with special needs. Parents who were literate supported the education of their children with special needs, where by 49% of parents perceived special education as being very helpful to their children. This was in agreement with the literature review which stated that literate parents tend to value the education of their children who are disabled in one way or another. The study found that 51% of parents’ respondents reported that special education is either moderately helpful or fairly helpful to their children. These respondents had attained a secondary school certificate.
The study concerned with the literature review which stated that parents' respondents concurred with the literature review when 65.3% of them said that it costs more to educate a child with special needs than educating a “normal” child.

The other components which affected access and retention of children with special needs as per the study included transport 24.5%, medication 16.3%, meals 6.1%, equipments 10.2 and other costs amounting to 12.2% as shown in figure 4.7. Other factors were also identified as components which affect access and retention and they included negative attitude by regular teachers, distance of learning facilities, parental denial and fear of stigmatization as presented in figure 4.8.

To assess the factors affecting retention of children with special needs basing on the third objective, the teaching staff respondents were asked to indicate measures instituted in their schools to ensure children with special needs are retained in schools.

The study revealed that 20% of the sampled schools offer free meals as an incentive to ensure that children with special needs continue attending classes. Other measures included sensitizing the community on the need for special education, offering free transport as well as offering counseling to parents of children with disabilities (refer to fig 4.10)
5.3 Conclusions

Based on the data collected and analyzed in this study, the researcher arrived at several conclusions guided by the research objectives as stated below.

5.3.1 Trend in access and retention

The first objective which was to analyze the trend in access and retention of children with special needs in selected primary schools in Nairobi during the period 2003-2010, the study found that in all the schools sampled, no school had data on enrolment of learners with special needs in the year 2003. This is in agreement with the literature review. The Ministry of Education (2009) in the National Special Needs Education policy framework which clearly stated that there were no proper records to show access and retention of learners with special needs. The statement was further backed by Education facts and figures 2002 – 2008 (Ministry of Education 2009), where one would easily follow the access and retention figures from one class to another of the regular students and which was not the case with learners with special needs (Refer to Table 2.1). The government of Kenya sessional paper No. 1 (2005) also quoted that lack of data on children with special needs was a problem.

The researcher found that more boys with special needs are enrolled in schools unlike girls with special needs. The trend of children in access and retention was on a decreasing trend. The study revealed that access was at its highest in the year 2004 which declined tremendously by year 2008.
5.3.2 Assess the school based and home based factors

The second objective which was to assess both the school based and home based factors affecting access of children with special needs, the study revealed that though the government allocates money for special needs children, 62.5% of the respondents felt that the funds were insufficient. The government of Kenya sessional paper No. 1 (2005) in the literature review highlighted some of the school based and home based which concurred with the research findings. Insufficient funds were highlighted and so was lack of proper guidelines towards special education.

The study further revealed that lack of awareness of the importance of education to children with disability was also a factor. Parents’ level of literacy was also found to be a major attribute towards that education of children with disabilities.

5.3.3 Factors affecting retention

The third objective of the study was to assess the factors affecting retention of children with special needs. Parents’ respondents concurred with the literature review when 65.3% of them said that it was more expensive to educate a child with special needs than educating a “normal” child.

Transport to the schools was also seen as a major factor which affected retention of children with special needs. The study found that most parents had no transport of their own and being that these special schools were not next door like regular schools, most children with disabilities were forced to travel some distance to their respective schools.
Headteachers respondents (70%) felt that most children were not retained in schools due to transport problems.

Provision of meals was also seen as a factor which affected retention. For those schools which offered lunch programme, more children were able to come to school on daily basis. The study was therefore in agreement with the literature review, Government of Kenya (2005) where it stated factors affecting retention as transport, meals and provision of learning equipments. Parental level of literacy also posed as one of the factors which affects retention. For the parents who were literate, they saw the need of their children with disabilities remaining in school.

5.4 Recommendations
On the issue of trend in access and retention following what the study analyzed the researcher recommends that the government should come up with clear policies which will ensure that proper data on access and retention of children with special needs is provided. The government should ensure that all headteachers provide proper and up to date records on enrolment and retention of children with special needs per class on yearly basis. This will enable the stakeholders know the exact number of learners per school and per class and also be able to follow up if the trend is on an upward move or on a downward move. This will make it easier for the stakeholders to come up with strategies that will ensure that more children with special needs access school.
On assessing the school based and home based factors the researcher recommends that the government should increase its allocation of funds in special schools. This will enable more schools be able to purchase learning equipments such as Braille machines, hearing aids as well as wheelchairs. The donors should also fund education of children with special needs. This will enable most parents to be able to send their children with disabilities to school as the cost of buying learning equipments which are very costly to be precise will be shouldered by other stakeholders. The government should also create awareness on the importance of education to a child with disabilities. Stakeholders should also give medication facilities to these children since some of them have conditions which require frequent medication follow up.

The third objective which looked at the factors affecting retention, the researcher recommended that the government should try to build more schools or introduce more special units catering for all the disabilities within each constituency. This will enable parents take their children to schools that are near their homes and thus avoiding the issue of transport. Under some unavoidable circumstances where children have to go to far off schools, the government together with the other stakeholders should provide transport to the schools. This will ensure that most children will be retained in school as transport was seen as a major factor towards retention. The government and other stakeholders should ensure that special schools are provided with lunch for the children. The research also revealed that provision of meals will increase retention of learners with special needs in schools.
5.5 Recommendations for further research

1. This study was only conducted in selected special schools / units. Future researchers should extend their researchers in all special schools / units within Nairobi.

2. This study was conducted in Nairobi province alone. Future researchers could extend it to other provinces, so that we may get the exact data of children with special needs who access school.

3. While this study involved only public primary schools, similar research needs to be carried out in public secondary schools and tertiary institutions.

4. The performance in academics of learners with special needs should be studied to find out which learners perform better.
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APPENDICES

APPENDIX I: Questionnaire for headteacher's of children with special needs

Dear respondent,

The researcher is a post graduate student (M.ED) at Kenyatta University undertaking a study on factors affecting access and retention of children with special needs in selected primary schools in Nairobi province.

Please tick [✓] where appropriate or fill in the required information on the spaces provided.

Do not write your name anywhere on this paper. Confidentiality will be maintained for personal comments and view.

PART I: Personal background information

1. Your gender
   Male [ ] Female [☐]

2. What is your age group
   Under 25 years [☐]
   26 – 35 years [☐]
   36-45 years [☐]
   46 – 55 years [☐]
   56 and above [☐]
3. Level of education

Primary □
Secondary □
University □
Others (Specify)

4. Professional qualifications

PI □
Diploma (Ordinary) □
Diploma (KISE) □
Post graduate diploma □
B.ED (ordinary) □
B.ED (Special education) □
M.ED □
Others (Specify)

5. Years of experience as a headteacher

1-3 years □
4-10 years □
11-15 years □
16-20 years □
21 and above □
PART II: School background information

6. Name of institution

7. District
   - Nairobi East □
   - Nairobi West □
   - Nairobi North □

8. Type of school
   - Special school □
   - Regular school with a unit □

9. Category / type of impairment
   - Hearing impaired □
   - Visually impaired □
   - Mentally impaired □
   - Physically impaired □
   - Multiple handicaps □
   - Others □

PART III: General questions

10. According to your qualification, what do you think about your preparedness for special needs education (SNE)

   - Very sufficiently □
   - Sufficiently □
11. To what extent has the government provided resources for special needs learners in your school?

None ☐
Few ☐
Enough ☐

12. Does your school benefit from the government funding for Special Needs Education?

Yes ☐
No ☐

Not sure ☐

ii) If yes how is the money used

16. From the information given in question 12 above, what you will say about the situation need of children with special needs in your school on yearly basis from 2004 - 2010.

17. Do you think the introduction of free primary education in 1999 has made an impact on you regarding children with special needs in your school?

Yes ☐
No ☐

If yes, explain.
13. Please fill in the following information on enrolment of children with special needs in your school.

<table>
<thead>
<tr>
<th>Year</th>
<th>Boys</th>
<th>Girls</th>
<th>No. of children enrolled</th>
<th>Boys</th>
<th>Girls</th>
<th>No. of children who dropped out</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
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14. From the information given in question 13 above, what can you say about the retention trend of children with special needs in your school on yearly basis from 2003 - 2010?

15. Do you think the introduction of free primary education in 2003 has had an impact on enrolment of children with special needs in your school?

Yes ☐ No ☐

b. If yes, explain how ________________________________
16. Does your school charge any fees for children with disabilities?

Yes □  No □

b. If yes, explain how it is used

17. In your opinion, do you think children with special needs have access to education?

18. What are some of the reasons which may hinder children with disabilities from accessing education?

19. What are some of the things your school offer to ensure that these children are retained in schools?

20. How best can we improve on access and retention of children with special needs in our schools?

Kindly accept my gratitude for spending time on this questionnaire and for providing the information.
APPENDIX II: Questionnaire for teachers’ of children with special needs

Dear respondent,

The researcher is a post graduate student (M.ED) at Kenyatta University undertaking a study on factors affecting access and retention of children with special needs in selected primary schools within Nairobi province.

Please tick [ ] where appropriate or fill in the required information on the spaces provided.

Do not write your name anywhere on this paper. Confidentiality will be maintained for personal comments and view.

**PART I: Personal background information**

1. Your gender
   - Male [ ]
   - Female [ ]

2. What is your age group
   - Under 25 years [ ]
   - 26 - 35 years [ ]
   - 36-45 years [ ]
   - 46 - 55 years [ ]
   - 56 and above [ ]
3. Level of education

- Primary  
- Secondary  
- University  
- Others (Specify)  

4. Professional qualifications

- PI  
- Diploma (Ordinary)  
- Diploma (KISE)  
- Post graduate diploma  
- B.ED (ordinary)  
- B.ED (Special education)  
- M.ED  
- Others (Specify)  

5. Teaching experience

- 0-5 years  
- 6-10 years  
- 11-20 years  
- 21-30 years  
- 31 years and above  

6. Years of experience as a teacher for learners with special needs

- 1-3 years  
- 4-10 years  

73
11-15 years □
16-20 years □
21 and above □

PART II: School background information

7. Name of institution ________________________________

8. District
   Nairobi East □
   Nairobi West □
   Nairobi north □

9. Type of school
   Special school □
   Regular school with a unit □

10. Category / type of impairment
    Hearing impaired □
    Visually impaired □
    Mentally impaired □
    Physically impaired □
    Multiple handicaps □
    Others □
PART III: General questions

11. According to your qualification, what do you think about your preparedness for special need education (SNE)
   - Very sufficiently
   - Sufficiently
   - Insufficiently

12. To what extent have the government provided resources for special needs learners in your school?
   - None
   - Few
   - Enough

13. Does your school benefit from the government funding for Special Needs Education?
   - Yes
   - No
   - Not sure

   ii) If yes how is the money used

14. Are you involved in decision making on the requirements of learners with disabilities?
   - Fully involved
   - Partly involved
   - Not at all
15. Which areas should be given priority by the administrators for improvements


16. How would you rate the availability for learning materials and equipments for learners with special needs

Adequate □ Not Adequate □

17. How often do administrators call for consultative meetings with the staff members?

Regularly □ Irregularly □

18. Do you think the introduction of free primary education in 2003 has had an impact on enrolment of children with special needs in your school

Yes □ No □

b. If yes, explain how


c. If no explain why


19. Does your school charge any fees for children with disabilities

Yes □ No □

b. If yes, explain how it is used
20. In your opinion, do you think children with special needs have access to education?


21. What are some of the reasons which may hinder children with disabilities from accessing education?


22. What are some of the things your school offer to ensure that these children are retained in schools?


23. How best can we improve on access and retention of children with special needs in our schools?

Kindly accept my gratitude for spending time on this questionnaire and for providing the information.
APPENDIX III: An Interview Schedule for parents of children with special needs

Dear respondent,

I am a postgraduate student (M.ED) at Kenyatta University undertaking a study on factors affecting access and retention of children with special needs in selected primary schools in Nairobi province.

PART A

Personal Background information

1. Parent
   Male □ Female □

2. What is your age group?
   21 – 30 □
   31 – 40 □
   41 – 50 □
   51 – 60 □
   Over 60 years □

3. What is your Marital status
   Married □
   Widowed □
   Divorced □
   Single parent □

4. What is your level of Education
5. **What do you do for a living?**

6. **What is the sex of your child with disability**
   - Male □
   - Female □

7. **How old is he/she?**

8. **Which type of disability does your child have?**

9. **What is the cause of the disability if known?**

10. **How did you learn about the child’s problem?**

11. **Which school does your child attend?**

12. **Who helped you get a place for your child in this school/unit?**

13. **Which class is your child in?**

14. **For how long has she/he been in school?**

15. **Have you ever attended any school meeting for your child?**
16. At what age did you enroll your child in school?

17. Who finances your child’s education?

18. What means does your child use to go to school?

19. a) How helpful is this education programme to your child?

   - Very helpful
   - Moderately helpful
   - Fair
   - Slightly helpful

b) Give a reason for your answer in 19 a

20. How far do you hope your child will go in education

   - Primary
   - Secondary
   - College (technical)
   - Ordinary college
   - University

21. Does it cost you more to educate a special child than a normal child

   - Yes
   - No

If yes, give a reason
22. In your own opinion, do you think the government has allocated enough resources to the education of the special children

23. Suggest possible ways that the government can use to ensure that many children with special needs get access to schools

Thank you for your co-operation
Part B

MAHOJIANO YA WAZAZI WENYE WATOTO WALEMAVU KATIKA JIJI LA
NAIROBI

1. Mzazi
   Mama □  Baba □

2. Umri wako uko katika kundi gani?
   21 - 30 □
   31 - 40 □
   41 - 50 □
   51 - 60 □
   Over 60 years □

3. Umeolewa au umcoa?
   Ndio □  La □

4. Umesoma hadi kiwango gani?
   Hukuenda shule □
   Shule ya msingi □
   Shule ya upili □
   Chuo cha ufundi □
   Chuo kikuu □

5. Unafanya kazi gani?

6. Mtoto wako mlemavu ni wa umbo gani?
   Msichana □
   Mvulana □
7. Ana umri gani?

8. Mtoto wako ana ulemavu upi?

9. Kiini cha ulemavu huo ni nini?

10. Ulijuaje kuhusu ulemavu wa mtoto wako?

11. Mtoto wako huenda shule ipi?

12. Ni nani aliyelesa kupata hiyo shule?

13. Mtoto wako yuko darasa la ngapi?

14. Amekua shuleni kwa muda gani?

15. Umewahi kushiriki mkutano wowote wa wazazi shuleni?

16. Ulimeleka mtoto wako shuleni akiwa na miaka mingapi?

17. Ni nani anayemlipia mtoto wako pesa za shule au karo ya shule?

18. Hii masomo iko na manufaa katika maisha ya mtoto wako?

   Ndio □  La □

19. Mtoto wako huenda vipi shuleni?

20. Unamatarajio yapi kuhusu masomo ya mtoto wako?

   Shule ya msingi □
   Shule ya upili □
   Chuocha ufundi □
   Chuoo kikuu □

83
21. Ina kugarimu senti ngapi kumsomesha mtoto mlemavu?

22. Kwa maoni yako, unadhaniaserikali inafanya juhudi ya kutosha kuhusu watoto walemavu.

23. Toa kauli kwa serikali kuhusu watoto walemavu

Asante sana kwa usaidizi wako
APPENDIX IV: Table showing enrolment in special schools by type of impairment, 2003 and 2007

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</table>

Source: Ministry of Education (2009)
APPENDIX V: Functional Specials Schools and Units in Nairobi
(Source: City Education as at November 2010)

SPECIAL UNITS

NAIROBI EAST

Mwangaza Primary School  Mentally Handicapped
Thawabu Primary School  Mentally impaired
Bidii Primary School  Mentally Handicapped
Unity Primary School  Mentally Handicapped
Kwa Njenga Primary School  Mentally Handicapped
Martin Luther Primary School  Mentally Handicapped
Ronald Ngala Primary School  Mentally Handicapped
Our Lady of Mercy (South B) Primary School  Mentally Handicapped

NAIROBI WEST

Toi Primary School  Mentally Handicapped
Mbagathi Rd Primary School  Mentally Handicapped
Kangemi Primary School  Mentally Handicapped
Kabete Vet lab primary school  Mentally Handicapped
Joseph Kang’ethe Primary School  Hearing Impaired
Kilimani Primary School  Deaf blind / visually impaired
Riruta Primary School  Mentally Handicapped
Aga Khan Primary School  Hearing Impaired
NAIROBI NORTH

Salama Primary School   Mentally Handicapped
Mararui Primary School  Mentally Handicapped
Githurai Primary School  Mentally Handicapped
Buruburu Primary School Autism
Baba Dogo Primary School Mentally / Hearing Impaired
Daniel Comboni Primary School Mentally / Hearing Impaired
Pumwani Primary School  Mentally Handicapped
New Eastleigh Primary School Mentally Handicapped
Racecourse Primary School Hearing Impaired
Kiwanja Primary School  Mentally Handicapped
Njathaini Primary School Mentally / Hearing Impaired
City Primary School      Mentally / Autism
Parklands Primary School  Cerebral Palsy (CP)
Muthaiga Primary School  Visually Impaired
Our Lady of Mercy (Jogoo Rd) Visually Impaired
### SPECIAL SCHOOLS IN NAIROBI

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<td>Dagoretti</td>
<td>Nairobi West</td>
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<td>Mathare</td>
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<td>Tree side</td>
<td>Nairobi North</td>
<td>Mentally handicapped</td>
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APPENDIX VI: Table for Determining Sample Size from a given population

Determining sample size for research activities by Robert V. Krejcie University of Minnesota, Duluth Daryle W. Morgan Texas A. & M. University; Educational and psychological measurement 1970, 30, 607 – 610. The ever increasing demand for research has created a need for an efficient method of determining the sample size needed to be representative of a given population.

No calculations are needed to use Table 1 for example one may wish to know the sample size required to be representative of the opinions of 9000 high school teachers relative to merit pay increases. To obtain the required sample size enter Table 1 at N = 9000. The sample size representative of the teachers in this example is 368. Table 1 is applicable to any defined population. It should be noted that as the population increases the sample size increases at a diminishing rate and remains relatively constant at slightly more than 380 cases.
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Note – N – is population size          a – is sample size
APPENDIX VII: Kenyatta University Research Authorization Letter

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: kubps@yahoo.com
dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 8710901 Ext. 57530

Our Ref: E55/12810/09
Date: 19th January, 2011

The Permanent Secretary,
Ministry of Higher Education, Science & Technology,
P.O. Box 30040,
NAIROBI

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION FOR MS. OGUTU MAUREEN TERESA
- REG. NO. E55/12810/09

I write to introduce Ms. Ogutu Maureen Teresa who is a Postgraduate Student of this University. She is registered for an M.Ed degree programme in the Department of Educational Management, Policy and Curriculum Studies in the School of Education.

Ms. Ogutu intends to conduct research for a thesis project entitled, "Factors Affecting Access and Retention of Children with Special Needs in Selected Primary Schools in Nairobi Province."

Any assistance given will be highly appreciated.

Yours faithfully,

[Signature]

19 JAN 2011

JOHN M. ODONG
FOR. DEAN, GRADUATE SCHOOL

JMO/fwk
APPENDIX VIII: Ministry's Research Authorization Letter

Republic of Kenya

National Council for Science and Technology

Telegram: "SCIENCE&TECH", Nairobi
Telephone: 254-020-213149, 2213102
254-020-31021, 2213123.
Fax: 254-020-2131215, 318245, 318249
When replying please quote
Our Ref.: NCST/RRI/12/1/SS-011/12/4

Maureen Teresa Ogutu
Kenyatta University
P. O. Box 43844
NAIROBI

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "Factors affecting access and retention of children with special needs in selected primary schools in Nairobi Province" I am pleased to inform you that you have been authorized to undertake research in Nairobi Province for a period ending 31st March 2011.

You are advised to report to the Provincial Commissioner, Nairobi Province and the Director of City Education, Nairobi City Council, Nairobi before embarking on the research project.

On completion of the research, you are expected to submit one hard copy and one soft copy of the research report/thesis to our office.

P. N. NYAKUNDI
FOR: SECRETARY/CEO

Copy to:
The Provincial Commissioner
Nairobi Province

The Director of City Education
City Council of Nairobi
NAIROBI

Date: 24th January 2011
APPENDIX IX: Research Permit

This is to certify that:

Prof/Dr/Mrs/Miss MAUREEN TERESA OGUTU of (Address) KENYATTA UNIVERSITY P.O. BOX 43844, NAIROBI has been permitted to conduct research in:

Location,
NAIROBI District,
NAIROBI Province,
on the topic FACTORS AFFECTING ACCESS AND RETENTION OF CHILDREN WITH SPECIAL NEEDS IN PRIMARY SCHOOLS IN NAIROBI PROVINCE.

for a period ending 31ST MARCH 2011.

Research Permit No. NCST/RRI/12/1/SS-011/12
Date of issue 24/01/2011
Fee received SHS 1,000

Applicant's Signature

Secretary
National Council for Science and Technology
## APPENDIX X: Time frame / schedule

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<th>Activity / Month</th>
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<td>Field framework / conducting interviews</td>
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### APPENDIX XI: Budget

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APPENDIX XII: Map of Nairobi