

**CULTURAL AND ENVIRONMENTAL FACTORS AFFECTING TRANSITION OF
LEARNERS WITH PHYSICAL DISABILITIES FROM PRIMARY TO SECONDARY
SCHOOLS IN LAIKIPIA COUNTY, KENYA**

BY

JOHN M. MACHARIA

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other university or for any other award. This research thesis has been complemented by referenced sources duly acknowledged. Where text, data, or pictures have been borrowed from other sources, including the internet, these are specifically accredited, referenced, and cited in accordance with anti-plagiarism regulations.

Sign..... Date.....

John Muigai Macharia

E55/24573/2013

I/We confirm that the candidate under my / our supervision carried out the work reported in this thesis.

Sign..... Date.....

Dr. F. I. Wamocho

Department of Special Needs Education.

Sign..... Date.....

Dr. Nelly Otube

Department of Special Needs Education.

DEDICATION

To my loving wife Susan who sacrificed so much to allow me time to study. My late sister Salome for encouraging me to soldier on in education. My dearly beloved parents, the late Eutyclus Macharia and Shifra Wanjiku for having faith in me.

May our good Lord rest their souls in eternal peace.

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LIST OF ACRONYMS AND ABBREVIATION

AEO	: Assistant Education Officer
ANPPCAN	: African Network for Prevention and Protection of Children against Child Abuse and neglect
DEO	: District Education Officer
DQASO	: District Quality Assurance and Standards Officer
EENET	: Enabling Education Network
EFA	: Education for All
GCSE	: General Certificate of Secondary Education
GoK	: Government of Kenya
IDEA	: Individuals with Disabilities Education Act
IEP	: Individualized Education Program
MDG	: Millennium Development Goals
MoE	: Ministry of Education
NDL	: Nondisabled Learners
PD	: Physical Disabilities
PWD	: Persons with Disabilities Act
SNE	: Special Needs Education
UNESCO	: United Nations Educational, Scientific and Cultural Organization

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ABSTRACT

This study sought to determine cultural and environmental factors that affect transition rates of learners with physical disabilities from primary to secondary schools in Nyahururu Sub-County of Laikipia County, Kenya. A descriptive survey research design was used to determine the influence of environmental barriers, cultural factors, and teacher professional qualification on the transition of these learners from primary to secondary schools. Also studied are school interventions to counter the barriers. Schlossberg theory of transition developed in 1981 was adopted for this study. The target population was 518. It comprised 18 learners with physical disabilities (PD), 65 teachers, 434 learners without disabilities and 1 Ministry of Education staff. Purposive sampling of schools was done since only schools with learners with PD were used in the study. Random sampling was used to select typical learners. The study was carried out in 6 schools (4 primary and 2 secondary) and involved a sample of 77 respondents. The sample included 18 learners with PD, 38 learners without disabilities, 6 head teachers, 14 teachers, and an MoE Officer in charge of Special Needs Education (SNE) in the Sub-County. An interview schedule and questionnaires were used to collect data on cultural, environmental and teacher qualification factors influencing transition rates of these learners. A pilot study was carried out in two schools: Ngarearo and Bishop Loius Ngarenaro primary and secondary respectively. These schools had similar characteristics with those in the main study. Data was analyzed using Statistical Package for Social Sciences (SPSS). Both qualitative and quantitative techniques were used to analyze data. Qualitative data was derived from open-ended questions and an interview with the Sub-County SNE coordinator. Quantitative data was derived from closed-ended questions. Validity was done through expert advice from two special education lecturers. Test-retest method was used to test for reliability. The findings were presented through descriptive statistics by use of percentages, frequency tables, bar graphs and pie charts. Data collected revealed that only 0.7% of learners with PD had transitioned to secondary schools over a period of seven years. Further, distance, congested classrooms, lack of individualized attention, teacher workload, lack of trained staff in SNE, unmodified school infrastructure and inaccessible facilities like toilets and some of the class rooms pose major environmental impediments to transition. Schools set performance culture, teacher preconceived performance expectations of learners with PD, parents and teachers attitudes, head teachers preference for placement of these learners in special schools, stereotypes of causes of disabilities provide an insight to some of the cultural factors affecting transition rates of learners with PD a gap that needs filling with regard to Nyahururu Sub-County. Key recommendations include: introduction of SNE curriculum in all teacher training institutions, in-servicing of regular schools teachers and inter-ministerial collaboration with stakeholders to ensure full inclusion and improved transition of learners with PD.

CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.0 Introduction

This chapter comprises the background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, delimitation and limitations, assumptions, theoretical and conceptual framework as well as operational definition of terms.

1.1 Background to the Study

Culture is a total way of life for a society, its traditions, attitudes, beliefs and habits (LaGuardia & Guth, 2003). Transition is a natural part of life that we all experience at some point in time for example when we are graduating from pre-school to primary school, primary school to secondary, and so on. Typically, transition to secondary school involves tremendous simultaneous changes in school environments, relationships, and academic expectations (Anderson, Jacobs, Schramm & Splittgerber, 2000). Hughes, Banks and Terras (2013), observe that many students with disabilities and their families experience difficulties ranging from accessing necessary transition information, cultural and environmental barriers to lack of readiness for school learning environment.

Beliefs across many cultures are that disability is the result of a curse from God, violation of societal norms, breaking laws and family line, witchcraft, misfortune, unapproved marriages, evil spirits and so on (Leavitt, 1998) .

These beliefs lead to stigmatization and discrimination of learners with disabilities restricting their participation in normative school and community activities (Eskay, 2009). On the other hand, environmental factors as identified by Pivik, Mc-Comas, Macfarlane and Laflamme (2002), in their study of eight integrated schools in Ontario Canada for example range from lack of adapted: doors, passageways, elevators, washrooms, stairs and ramps, lockers, water fountains, and recreational areas which pose some of the environmental impediments encountered by learners with PD. In addition, they identified physically getting into school by many of these students as a major problem. This in turn impacts negatively on access and transition of these learners. Committee on Disability in America (2007), observes that although personal challenges such as physical, sensory, cognitive and communicative limitations, environmental barriers often present the most significant challenges for transition. Importance of access of secondary education by learners with disability need not be overemphasized as Rimmerman and Araten-Bergman (2005), observe that education allows for the development of human capital or potential, sense of dignity and self-worth.

In the United States, IDEA Improvement Act of 2004 (IDEA, 2004), was done in recognition of the key role that schools can play in supporting successful

transitions and affirms that the primary purpose of the free appropriate public education guaranteed to children and youth with disabilities is to ensure learner progression in education, employment, and achievement of self independence (IDEA 2004).

However, Newman, Wagner, Cameto and Knokey (2009), note that inspite of decades of work in education and human services, when compared to young adults without disabilities, children and adults with disabilities have increased rates of dropping out of high school, underemployment and unemployment, illiteracy, incarceration, and poverty depending on their cultural and ethnic background.

Shafer and Rangasamy (1995), explain that Native Americans traditional culture of cooperation, interdependence, and communal responsibility conflicts with that of Anglo-American beliefs which place value on certain settings, such as independent living and work environments, denying as it does all too often, the importance of interdependence, reciprocity, and inclusion leading to transition failure. Wilder, Jackson and Smith (2001), in their report on school-to-work transitions of Navajo students in the United States, recommend specialized transition programming for Native American students that includes appropriate cultural awareness and sensitivity if transition to secondary and postsecondary education will improve.

In Africa, many countries have embraced international Conventions such as the Salamanca Statement of 1994, United Nations Declaration of human Rights of 1948, United Nations Convention on the Rights of Persons with Disabilities of 2006 all of which require countries world over to ensure provision of basic education to ALL children without discrimination.

Zimbabwean equalitarian values in the law require schools to enroll pupils without discrimination creating equal opportunities for all pupils and those with special needs admitted in centres of their own choice (Mpofu, 2008). However, lack of appropriate physical environment and materials among other educational strategies restrict the number of learners with disabilities transitioning to secondary schools in Zimbabwe, (Mclean & Odon (1997). Agbeneyga (2007), says that in Ghana teachers with SNE training have positive attitudes towards teaching learners with disabilities unlike their counterparts who are not professionally qualified. Fakolade, Adeniyi and Tella (2009) note that lack of professional knowledge and skills among teachers in Nigeria leads to low enthusiasm for mainstreaming leading to low transition rates of learners with disabilities.

In Kenya, traditional and spiritual beliefs frame the understandings of disability with many communities attributing disability to witchcraft and curses resulting from parental violation of traditional norms, or as a result of vengeful spirits (Oloo, 2006). Hence, there is usually a feeling of fear and pity, which may result

in the isolation of those with disabilities (Oloo, 2006 & Monk & Wee, 2008). Ingstad and Grunt (2007), in a multi-sited study they conducted in ten districts over 2005 and 2006 on ‘The lives of People with Disabilities in Kenya’ where 91 interviews were conducted revealed that parents with children with disabilities preferred educating non-disabled children to those with disabilities. This notwithstanding, favouring of boys runs deep in the African culture (Aikman, Hali & Rubagiza, 2011).

Although Kenya is a signatory to several international declarations on rights to education for example, the Jomtien Agreement (1990), Dakar Framework for Action (2000), and the Convention on the Rights of Persons with Disabilities (CRPD); The Policy Framework for Education Paper of Kenya (2012) acknowledges that not only is the access and participation of children with disabilities in education relatively low but also their educational needs are generally not specifically addressed.

Kenya National Commission on Human Rights report of July 2014 further identifies physical access of learning environment, transport, geographical terrain and lack of infrastructure responsive to disability needs as major environmental barriers that would affect transition. Ministry of Education budgetary Survey (2009) data only highlights increase in enrolment of special needs pupils at various levels of education from 84,650 in 2002 to 221,995 in 2008 but is quiet on transition. Further, the report shows that transition rate from mainstream primary

to secondary increased from 45.8 percent in 2003 to 59.9 percent in 2008 and was estimated at 64.1 percent in 2009 without a mention of those with disabilities. A pertinent question arises, “What is the position of transition rate for learners with special education needs?”

1.2 Statement of the Problem

Transition to secondary school is a significant life event and as such has the potential to impact upon one's quality of life. Learners with PD are more likely to drop out of school than their non-disabled peers if their educational needs are not met. The success with which these children make their transition from primary to secondary school has the potential to enhance their quality of life and future education. Children with PD are particularly vulnerable and may not fully benefit from enrolling in regular primary schools especially if they experience problems in negotiating the school's environment, adapting to new roles or fail to develop a sense of belonging to that environment. Physically getting to school for many of these students has been noted to be a major challenge. Learners who are wheelchair bound and need to wheel themselves to and from school and around the school compound daily may find it difficult to do so over time and drop out. The distance from home to school for many of these children may pose a challenge in cases where the learners depend on unreliable public transport if schools do not offer transport or residential facilities. The ground terrain from where some of these learners live would be difficult to maneuver during wet

weather conditions. In addition, the school to transition to may have infrastructure that is unresponsive to disability needs hampering access to education and transition.

Furthermore, negative cultural beliefs and attitudes that discriminate against persons with disabilities, preference for a particular gender (boys) and typically developing children to those with disabilities are factors that could impact on transition. Currently in Nyahururu Sub-County, transition data available from a survey carried out in February 2014 by the Laikipia County Steering Group in conjunction with Kenya Food Security Group indicated that transition rate from Primary to Secondary schools increased from 59 percent in 2011 to 65 percent in 2014. However, no mention was made of learners with disabilities. In addition, data available in the Sub-County's education office reveal that between 2004 and 2015 some 913 learners with diverse disabilities were assessed and placed in either regular, integrated programmes, special primary schools. A majority of these (283, or 31%) had either PD or were physically and multiply handicapped. Nevertheless, little mention of their transition from primary to secondary school is made despite their enrollment over the same period. A question therefore arises, "What becomes of these learners after placement in primary schools?" This scenerio aroused the need to carry out a study to find out the impact of culture and environment on low transition rates of these learners from primary to secondary schools.

1.2.1 Purpose of the study

This study sought to determine cultural and environmental factors that influence transition rates of learners with PD from primary to secondary schools in Nyahururu Sub-County of Laikipia County, Kenya.

1.2.2 Objectives of the study

Objectives of this study sought to find out:

1. Environmental barriers faced by learners with PD in public primary schools in Nyahururu Sub-County.
2. Cultural factors hindering transition of these learners with PD in Nyahururu Sub-County.
3. School intervention measures and teacher training in SNE impact on improving transition of learners with PD in Nyahururu Sub-County.

1.2.3 Research questions

The study was guided by one pertinent question “How have cultural and environmental factors impacted on the transition rate of learners with PD from primary to secondary schools in Nyahururu Sub-County of Laikipia County?” The study sought to find answers to the following questions.

1. How have different environmental barriers affected transition of learners with PD from primary to secondary schools?

2. How have negative cultural attitudes and beliefs faced by learners with PD influenced their transition?
3. How has teacher professional qualification and training in SNE helped in meeting the educational needs of learners with PD and their transition?
4. How have intervention measures taken by schools improved transition rates of learners with PD?

1.3 Significance of the study

The findings of this study may be useful to policy makers and educational planners in Nyahururu Sub-County and the County in several ways. Findings on the impact of culture on transition have been made clear and this could pave way for sensitization campaigns in the society to ensure all children with disabilities who may be excluded in education are included. Environmental factors such as school infrastructure, classroom learning environment, communication/transport and others discussed in the study that have been indicated as affecting transition may help guide education planners prioritize their removal in order to improve transition of learners with PD. The researcher hopes that teacher training colleges will incorporate special needs education curriculum to enable teachers develop skills to mitigate for the needs of learners with disabilities as espoused by the findings of this study. The ministry of health too will find this research findings vital in planning follow up and sensitization campaigns.

1.4 Delimitations and limitations of the study

1.4.1 Limitations

The study limited itself to public institutions only because primary education is free and secondary education is subsidized and as Keriga and Bujra(2009) reiterate, disability seems to be predominantly among the disadvantaged. Not everyone in the sampled institutions was a respondent due to financial implications of providing questionnaires. The findings of the study are only limited to learners with physical disabilities in Nyahururu Sub-County and may not be generalized to the whole county.

1.4.2 Delimitations

While the study acknowledged that there were other factors such as family size, parents occupation, social and economic status of parents, parent's level of education as well as family nature that would influence transition, the study focused on cultural and environmental factors only. The choice of only one Sub-County for study arose from considering the vastness of the entire County, time frame of carrying out the study and availability of funds. The study focused only on learners with PD, their peers without disabilities, head teachers, teachers and one MoE official.

1.5 Assumptions of the study

The following were the assumptions of the study. That:

1. All respondents would give responses as required of them by the items in the questionnaires. Molloy (2003), says that the validity of data depends on ability and willingness of the respondents to give the information requested.
2. All the respondents would be aware of the cultural and environmental factors that impede transition of learners with PD.
3. Primary education is free; learners with PD have seized the opportunity and enrolled in primary schools in their neighbourhood.
4. Learners with PD would give their responses without fear and freely.
5. All respondents would respond to all the questions in the questionnaires.

1.6 Theoretical and conceptual framework

1.6.1 Theoretical framework

The study was based on Schlossberg's transition theory proposed in 1981. She believed a need existed to develop a systematic framework that would facilitate an understanding of adult transition. Schlossberg identified four key factors for coping with transition thus, situation, self, support and strategies.

Schlossberg (1995), evaluates situation in terms of the degree of influence from among other factors: the amount of influence and power one believes they have

throughout the transition, the degree to which the transition resulted in a change in one's responsibilities, duties, and positions, the degree to which previous transitions were similar to the current transition, other stressors in one's life separate from the transition, and the degree to which the individual views the situation positively, negatively, or benign. As each individual student with PD has a home environment s/he has been accustomed to, there is need to evaluate the new environment/situation and the barriers therein to ensure smooth transition.

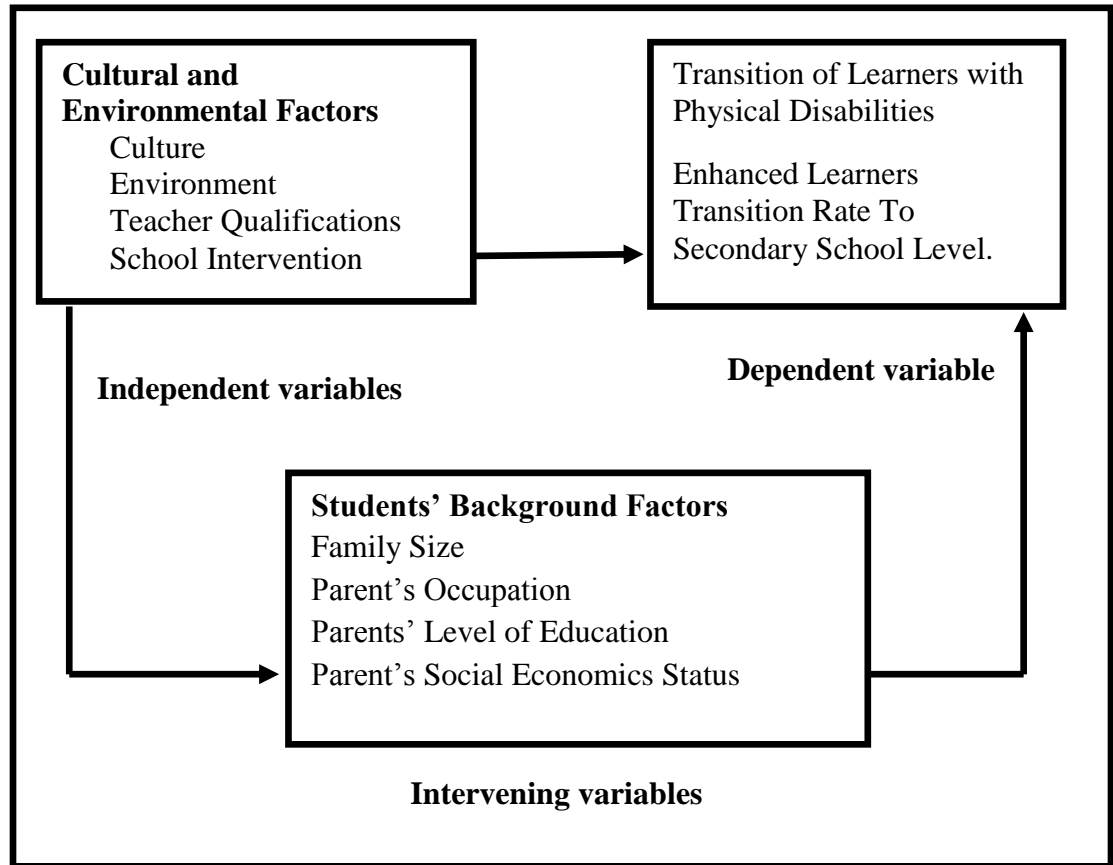
All learners arrive in school with personal experiences and cultural inclinations that determine how well they will fit in within the new environment. Learners with PD have expectations and values unique to each individual that could aid in their transition or be altogether detrimental. Schlossberg (1995) views self from two perspectives. First, from personal and demographic characteristics in which s/he considers aspects such as socio-economic status, age and stage of life, state of health and ethnicity. Secondly, psychological resources such as ego development, outlook, commitment and values. Learners with PD may experience a hard or even develop a sense of social isolation if there is a mismatch between their home and community culture and that of the school they transition to.

For transition to be successful, students, parents, teachers, and community-based personnel need to work together as a team. Teachers need knowledge and skills to be able to offer the necessary support learners with disability may require. Schlossberg (1995) classifies the types of supports one may receive as: institutions

or communities to whom the individual is involved, network of friends, family units, and intimate relationships. Teacher qualification in teaching learners with PD is important if identification of individual learner's need will be done.

Strategies: refer to each individual's ability to recognize and modify his/her effective coping responses and processes, and further involve what advisors can do to help students develop techniques to facilitate their progress (Schlossberg, Waters & Goodman, 1995). An understanding of coping mechanisms of individual learners with PD will help in determining interventions that will ensure successful transition.

1.6.2 Conceptual framework



Source: Researcher's

Figure 1.1 Conceptual frameworks on cultural and environmental effects on transition of learners with physical disabilities

As shown by the diagram, the learner with physical disabilities who is exposed to positive cultural values and beliefs, an environment that meets his/her educational needs fits in well and this ensures the learner's ability to transition from one grade to another. Transition of learners with PD is very likely to improve where the society has positive attitudes, beliefs and socially accept children with disabilities.

This is likely to happen since more of these children will be enrolled in schools. While in school too, they will feel accepted and hence develop self image and strategies of coping. Further, an all round modified environment that is disability friendly is very likely to improve transition rates of learners with PD. All these notwithstanding, teachers well trained in SNE with some teaching experience may help improve transition.

1.7 Operational Definition of Terms

Accommodation: Any necessary and appropriate modification and adjustment needed in a particular case to ensure persons with disabilities have full enjoyment and participation in all learning exercises on an equal basis with their non-disabled peers.

Culture: the beliefs, values, behaviours, attitudes, habits and customs that characterize a people's way of life.

Discrimination: Any distinction, exclusion or restriction on the basis of disability which has the purpose or effect of impairing or nullifying the recognition, enjoyment or exercise, on an equal basis with non-disabled peers.

Environment: the surroundings of, and influences on an operating system.

Environmental factors: Any life circumstances that can hinder a learner with disabilities' well-being and put him/her at risk.

Impede : prevent, hinder or make forward progress difficult.

Matatu :public service vehicle carrying less than twenty nine passengers.

Physical disabilities: a limitation that affects a person's mobility or dexterity. It may have existed since birth or it could be the result of an accident, illness, or injury suffered later in life.

Transition: the process of moving from one level of education to another. The ability to proceed from primary to secondary school and adjust comfortably.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

In the previous chapter, an effort was made to discuss the world to local view of the study problem and a number of sources cited. In addition, the problem of study was stated as well as objectives, research questions, significance, and finally theoretical and conceptual framework. In this chapter, reviewed literature is arranged in the following order: environmental impediments on transition of learners with PD, cultural effects on access, retention, and transition of learners with PD, teacher qualification in meeting educational needs of children with PD, strategies of improving transition, and a summary of the chapter.

2.1 Environmental barriers on access, retention and transition of learners with physical disabilities

The human right of all people to education was first defined in the United Nations' Universal Declaration of Human Rights of 1948 and further elaborated in a range of international conventions, including the Convention on the Rights of the Child and more recently in the United Nations' Convention on the Rights of Persons with Disabilities in 2006. In 1994 the World Conference on Special Needs Education in Salamanca, Spain produced a statement and framework for action. The Salamanca Declaration encouraged governments to design education systems that respond to diverse needs so that all students can have access to

regular schools that accommodate them in child-centred pedagogy (UNESCO, 1994).

According to the Dakar Framework for Action UNESCO (2000) governments initiated a global movement focusing on provision of quality basic education for all. Governments around the world made a commitment to achieve the EFA goals by 2015. The six EFA goals that governments committed themselves to achieve include: expand early childhood care and education; provide free and compulsory basic education for all; promote learning and life skills for young people and adults; increase adult literacy by 50%; achieve gender parity by 2005, gender equality by 2015; and improve the quality of education (UNESCO, 2000). The notion introduced in Education for All is that the regular classroom should continue to be the placement of first choice for students with exceptionalities. However, to meet the needs of individual learners with special educational needs within regular classroom settings continues to be an uphill task for many low and mid-income countries. It is not surprising that students with disabilities on average express concerns related to physical barriers within the school environment that are not readily experienced by non-disabled students, and this may add additional stress levels for students with disabilities not experienced by nondisabled students.

Physical access to school buildings is an essential prerequisite for educating children with disabilities (Stubbs, 2008). A school environment that is

inaccessible to students in wheelchairs or to those with other mobility aides and need elevators, ramps, paved pathways and lifts to get in and around buildings limit the number of learners with PD enrolled in a school. Even if it is possible to reach the school, there may be problems of stairs, narrow doorways, inappropriate seating, or inaccessible toilet facilities (Enabling Education Network, 2003). Accessibility can go beyond passageways, stairs, and ramps to recreational areas, paved pathways, and door handles. A student with cerebral palsy, for instance, may not have the ability to grasp and turn a traditional doorknob. Classrooms must be able to accommodate a student's assistive technology devices, as well as other furniture to meet individual needs (EENET, 2003). Quite often learners with PD also suffer from chronic physical health problems that lead to decreased physical mobility and difficulties in executing everyday activities. It is especially problematic for students with PD to navigate a post primary environment that is inaccessible. They may need to be prepared in advance when this transition is anticipated. Schlossberg, Waters and Goodman (1995), underscore the need to identify the challenges the student may encounter in the new environment in order to help the learner cope with the transition. Learners unable to develop transition coping skills fail to manage the new "Situation" (environment), and "self" and consequently end up dropping out.

UNESCO (2010), identifies communication/transport as an environmental barrier by noting that those with physical disabilities are likely to face difficulties in

travelling to school if, for example, the roads and bridges are unsuitable for wheelchair use and the distances are too great.

In a study by Enabling Education Network (2000), it was noted that many parents/caregivers of children with disabilities who never attended school (88.5%) reported that the roads were not well maintained for their children to walk on. Though secondary schools to transition to would be close to learners with PD as viewed by the typical population, their poor accessibility among children with mobility disability would reduce attendance (Robertson, 2000). Research has revealed that distance can be one of the barriers to learning for children with disabilities resulting in drop out or low transition. School-home distance might be the reason for dropping out of school among children with mobility difficulty.

The learning environment also must be physically accessible to students using wheelchairs, walkers, and assistive technology devices. Bronfenbrenner (1979), classifies the child as an organism in an ever changing environment, adapting to the processes each environment offers. For some, adaptation is a normal part of life assimilating the notion of transition with ease. For others, transition develops into a phobia that prevents the continuity of 'natural' development and learning. Successful adaptation emerges from inherent legacies provided by the child's history, and understanding of experiences associated with emotional responses to situations (Bronfenbrenner & Morris, 2006). Transition represents change for children. Such change evokes powerful emotions that can support and guide some

children, but for others (especially those with disabilities) can develop into insurmountable barriers that affect seamless learning.

Obtaining appropriate equipment as needed for individual students e.g. adapted mobility devices and walking frames for students, is a continuing barrier to providing equal access to education all through the school system (Dalton, 2005). More emphasis though is placed on assessment and evaluation systems which focus on academic performance rather than individual progress discriminating against children with special education needs.

Studies have indicated that there exist physical barriers in the learning environment that are not readily noticed by the non-disabled population but only felt by those with disability. Nevertheless, no study has been done in Kenya to show how this may affect access to education, retention and transition of learners with PD. The current study has analyzed environmental barriers from home-school and in the school learning environment that have impacted on transition of learners with PD a gap in knowledge that this study has attempted to fill.

2.2 Cultural Factors Impacting on Access, Retention and Transition of Learners with Physical Disabilities

Culture is a way of life and can be said to refer to practices, values, beliefs, attitudes and customs which are prevalent in a community. Culture includes the beliefs, values, behaviour and material objects that a given group of people esteem. Cultural values and beliefs are passed on from the older generation to the younger generations. The family is the first source of education for a child, and most learning occurs at home. Parents are frequently active in creating educational opportunities for their children, and if their cultural beliefs toward disability are negative, they limit a child's access to education. Mugo, Oranga and Singal (2010), in their report on youth transitions in Kenya claim that there is a disproportionate growth between girls and boys in special secondary schools while transition to secondary schools for those with disabilities is below 10%. They further say that there is inequitable access to education for children with special needs and more so those in rural areas unless with parental support.

Parental support has been shown to be of great importance in helping young people with disabilities to make educational progress. For example, Noble (2003), who was diagnosed with athetoid cerebral palsy at the age of three, talks about the difficulty of getting her coursework completed for her General Certificate of Secondary Examination exams. Her mother spent a lot of time with her, in particular reading back to her what she had written and correcting her spelling

mistakes. Noble (2003), states that it took a long time for her to get work down on paper because of her physical disabilities but the support she got from her mother was 'critical' to her success. Leake and Chalymay (2007), observe that having a social support network is often essential to maintaining academic progress and graduating. Attitudes from nondisabled individuals stemming from cultural beliefs often reflect preconceived opinions as to what a person with a disability can and cannot do, or stereotyped judgments of ability and disability.

Teachers have an important impact on young people, which can be either positive or negative (Kenny, McNeela, & Shevlin, 2000). Vaughan (2002), recommends that schools make time to assess their cultures (i.e., attitudes and beliefs about students with disabilities) as well as existing policies and procedures noting that negative messages can unintentionally be communicated to students via language or procedures for example, singling out students with disabilities as different rather than acknowledge that all students have different abilities. Low expectations can have a negative effect on young people's own perception of their abilities resulting in a self-fulfilling prophecy, especially where teachers may not expect students with disabilities to perform well at exams (*Educable*, 2000).

Chomba (2012), observes that the degree to which persons with disabilities are accepted within a society is not directly proportionate to that society's financial resources and/or technical knowhow. Florian (2008), observed that in some communities in Kenya and Zimbabwe, "a child with a disability is a symbol of a

curse befalling the whole family.” Such a child is a "shame" to the whole family, hence their rejection by the family or the community. Rejection results in exclusion of children with PD from school. Although the situation is gradually changing, the impact of culture on access, retention and transition of learners with special educational needs is not an issue that can simply be wished away (Florian, 2008). People's attitudes towards persons with disabilities, ignorance, neglect, superstition and fear are social factors that have exacerbated isolation of persons with disabilities. Recent research suggests students and teachers possess somewhat negative attitudes toward students with disabilities, or that they view individuals with disabilities as different from and inferior to individuals without disabilities (Gething, 1991). From a meta-analysis of research studies published from 1990 to 2000, examining attitudes toward children with disabilities, Nowicki (2003), concluded that children without disabilities generally preferred to interact with children without either physical or intellectual disabilities. Furthermore, McDougall, DeWitt, King, Miller and Petrenchik (2009), examined the attitudes of ninth-grade students toward students with disabilities and found that, although the majority had attitudes classified as neutral to positive, slightly over 20% had negative attitudes.

The report by Mugo et al (2010), on youth transitions notes that below 10% of learners with disabilities transition to secondary schools in Kenya. However, no study has been done on the influence of culture on the transition of learners with

PD in Nyahururu Sub-County. Further, there is a scarcity of research pertaining specifically to learners with PD with regard to influence of culture on transition from primary to secondary schools. The current study attempts to bridge this gap.

2.3 Impact of Teacher Professional Qualification on Improving Teaching and Transition of Learners with Physical Disabilities

Best (2010), observes that current service delivery trends for learners with physical, health, or multiple disabilities have broadened to include an array of placement options. For educational services delivery to be effective, decisions should be made based on considerations of the unique needs of students. Provision of such services may require involvement of more than one placement at any one given time. However, in the general classroom setting, instruction may not reflect the least restrictive environment for learners with special educational needs. There is evidence to suggest that, for administrators to facilitate effective service delivery, additional training in the area of special education as well as positive experiences with students with exceptionalities is an important component for developing and maintaining inclusive environments (Praisner, 2003 & Riehl, 2000).

Riehl (2000), views the role of the school principal being pivotal for fostering new meaning, promoting inclusive school cultures and instructional programs as well as building relationships between schools and communities. A study by Kenny, McNeela & Shevlin (2003), also found that teachers of different subjects

within the general classroom setting were not all trained to recognize disabilities and adapt their teaching practice methods appropriately. In this regard, learners' needs are not fully met creating room for unruly behavior and at times discontentment in learners who opt to drop out of school or transfer. In addition, teachers will require to use modified and an adapted curriculum that meets the needs, and limitations, of a diverse group of children. Flexible approaches in education are needed to respond to the diverse abilities and needs of all learners (UNESCO, 2009). Where teachers use rigid teaching methods and there is a lack of appropriate teaching materials children with disabilities are at increased risk of exclusion (UNESCO, 2009).

Claborn and Kane (2012), note that when learners needs are not met it may lead to problems including nightmares, refusal to go to class, headaches, stomachaches, nausea, vomiting, stress, anxiety, depression, obsessionality and loss of memory; which make it more difficult to cope with normal transition issues. This argument supports that of Kenny et al (2003) but contrasts the current study because this study has attempted to analyze the impact of teachers professionally qualified on transition rates of learners with PD in Nyahururu Sub-County.

2.4 Institutional Strategies of Improving Transition Rates of Learners with Physical Disabilities

Gina (2004), says that in order for any transition to be successful, it must be carefully planned. Planning should start well in advance of the actual transition

regardless of whether a student is moving from one activity to another, moving to another grade, graduating from high school, transitioning to a workplace, or getting to know new support people. Programming decisions need to be based on an understanding of the individual student. This means understanding the individual student's strengths, needs, and goals as well as those of the student's family. In addition, they maintain that transitions involve input from a variety of people, including students, parents, special and general education teachers, and community-based personnel. Through such collaboration the collaborating team creates a supportive relationship and provides a problem-solving approach to transition planning.

As students move through the educational system, they need to become more involved in planning their own transitions. Research has consistently shown that student involvement in the planning process helps students to develop an understanding of their individual educational needs, abilities and provides opportunities for them to develop much needed self-advocacy and problem-solving skills (Harrison & Prentice, 2004). Effective transition planning should be comprehensive in scope. Students with PD are not a homogeneous group and as such they may face a variety of challenges, including academic, social, vocational, and interpersonal difficulties. As a result, transition planning should focus not only on the academic skills needed for success in the new environment, but also on helping students develop the ability to solve problems in new

situations, to monitor and regulate their own performance, and to interact appropriately with peers and authority figures (Praisner, 2003). Finally, comprehensive transition planning should aim at helping students become aware of their strengths and the type of supports and adaptations available to them in dealing with their learning difficulties.

Transition is the final aspect of a process whether short or long. Removal of physical barriers ensures accessibility to the environment, participation, and retention of learners. Principles of universal design should underlie policies of access to education. Many physical barriers are relatively straight forward to overcome: changing physical layout of classrooms can make a major difference (Ferguson, 2008). Incorporating universal design into new building plans is cheaper than making the necessary changes to an old building and adds only around 1% to the total construction cost (Organization for Economic Cooperation and Development, 2006).

Teachers who serve individuals with PD must possess critical skills in direct service and interaction with other personnel in order to improve not only access and retention but also transition. Evidence clearly indicates that the environment and culture of the school setting can have a direct impact on the acceptance of students with exceptionalities (Frederickson, 2007, McDougall, 2004 & Riehl, 2000). Although the above researchers' argument compares with the current study, a major difference between their study and this one is that the current study

analyses the impact school interventions have on transition of learners with PD from primary to secondary schools.

The role of the school principal has been shown to be pivotal for fostering new meaning, promoting inclusive school cultures and instructional programs as well as building relationships between schools and communities (Riehl, 2000). The willingness of administrators to support inclusive environments has been linked to issues of training and experience. There is evidence to suggest that, for administrators, additional training in the area of special education as well as positive experiences with students with exceptionalities are important components for developing and maintaining inclusive environments (Praisner, 2003 & Riehl, 2000). A positive attitude toward inclusion has been shown to be the norm among both pre-service and practicing classroom teachers (Silverman, 2007 & Wiener, 2003). Factors contributing to this positive attitude include the belief that all students can achieve and the conviction that the classroom teacher can make a difference to student learning (Silverman, 2007, Wiener, 2003, Woloshyn, Bennett & Berrill, 2003).

While there is a demonstrable willingness on the part of teachers to include students with exceptionalities in their classrooms, real concerns remain over lack of training, classroom management issues, general and special education collaboration, as well as a perceived lack of support and resources (Silverman, 2007, Slee, 2006, Wiener, 2003 & Woloshyn et al, 2003).

Filling the gap of feeling inadequate on the basis of one's current knowledge and needed information will require in-servicing by specialist teachers. However, in the absence of specialist teacher, Best et al (2010), observe that teachers have many opportunities to gain additional knowledge and expertise provided by expanding technology. From the foregoing information, it's worth noting that Kenya has continued to participate in educational reforms with a view to fulfilling its commitment to EFA and achieving quality basic education by 2015. Since provision of and universal access to basic education for ALL has become fundamental to the government's overall development strategy, any impediments to this end should raise some concern. The current study attempted to analyse the impact of school intervention measures on the rate of transition of learners with PD from primary to secondary in Nyahururu Sub-County.

2.5 Summary of literature review

This chapter has reviewed literature on the world view toward provision of quality basic education for all and the commitment of world governments to achieve this by 2015. Literature on environmental barriers and their effects on learners with special educational needs have been widely reviewed. Environmental aspects that have been discussed include accessibility of the school environment, learning environment, distance from home, and communication. Effects of attitudes and beliefs with reference to administrators, teachers, parents and non-disabled peers are discussed. Several research findings have been referred to. Also discussed are

effects of teacher qualifications in meeting the needs of learners with special educational needs and their contribution in alleviating or increasing dropout rates. Strategies of ensuring successful transition and countering cultural, environmental, and professional challenges are outlined.

However, there lacks literature on how these factors have affected transition of learners with PD from primary to secondary schools in Kenya a gap the current study attempts to fill. There is lack of literature with regard to impact of culture and environment on transition of learners with PD from primary to secondary schools in Nyahururu Sub-County. In addition, information on impact of teacher professional qualification in improving transition of these learners also lacks a gap this study attempts to be fill.

CHAPTER THREE

RESEARCH DESIGN METHODOLOGY

3.1 Introduction

Having reviewed related literature to the study in the previous chapter, this chapter discusses research design, variables, target population, location of the study, sampling techniques, research instruments, pilot study, validity and reliability, data collection techniques, data analysis, and logistical and ethical considerations.

3.2 Research Design

The study used descriptive survey design. This research design was selected because it answers the question “what”, “where”, “who” and it is concerned with the characteristics of the whole sample. A descriptive survey research provides information useful to the solutions of local problems. This research method was considered to be the best suited for the study because it employs applications of scientific method of critically analyzing data and examining the source, materials, and interpreting data to arrive at generalizations and predictions (Best & Kahn, 2007). The study attempts to describe the influence of culture and environment on transition of learners with physical disabilities in Nyahururu Sub-County. Both quantitative and qualitative approaches of data collection have been used.

3.3 Variables

Mugenda and Mugenda (2003), describe different types of variables such as independent, dependent, intervening, confounding and antecedent variables. Variables are attributes or qualities of the cases that we measure (Kombo & Tromp, 2006). This study has used dependent, independent and intervening variables.

3.3.1 Dependent Variable

The dependent variable in this study was improved transition rates of learners with physical disabilities.

3.3.2 Independent Variables

Independent variables are those that cause change in the dependent variable (Bless, 1987). The independent variables in this study were cultural factors affecting education of learners with PD, environmental factors impacting on transition, qualifications of teachers teaching learners with PD and school interventions to improve transition. Positive cultural attitudes towards disability, inclusive culture of a school, all inclusive environments, that is, adapted equipment and facilities, adapted learning and teaching materials, collaboration and qualified personnel together increase access to education, retention, and progression at different levels hence improved transition from primary to secondary.

3.4 Location of the study

The study was conducted in Nyahururu Sub-County of Laikipia County in Kenya. The Sub-County borders Nakuru County to the west, Nyandarua County to the south, Baringo County to the north and Laikipia West Sub-County to the east. Selection of this Sub-County was based on the following reasons: first, assessment data from Educational Assessment and Resource Centres (EARCs) provided by SNE Sub-County coordinator of learners with diverse disabilities between 2004 and 2015 were 913. Of these, 283 had physical disabilities followed by those who had mental challenges-191. The remainder were indicated as having other handicapping conditions. Secondly, only 20 (7%) of those with PD were on home based programmes while the rest 263 (93%) were enrolled in primary schools. Thirdly, only 0.7% of those enrolled over a period of seven years had transitioned to secondary schools in the Sub-County. And finally, the researcher is from the locality and has some background knowledge of the area.

3.5 Target Population

The target population was 518 comprising 18 learners with PD in both primary and secondary schools, 283 pupils, 151 students, 6 head teachers, 59 teachers and one MoE officer incharge of SNE in the Sub-County. This population was used in the study because it was directly involved with the education of the learners with PD who are the direct recipients of the effects of cultural and environmental factors.

Table 3.1 Target populations

Type of school	No. of teachers	No. of Non-disabled learners	Learners with PD	Others
				Moe Staff
Primary	41	283	15	
Secondary	24	151	3	
Sub-Total	65	434	18	1
Total				518

3.6 Sampling Technique and Sample Size

3.6.1 Sampling Technique

The researcher purposively selected the schools to be studied within the Sub-County. This was done because only schools with learners with physical disabilities were involved in the study.

The selected school heads (i.e. head teachers and principals) were also purposively selected because they were involved with admissions and maintaining records on transition.

All learners with PD from upper primary to secondary in the sampled schools were used in the study because they possessed higher literacy skills and ability to respond to the questionnaires more effectively. Non-disabled learners from upper primary to secondary in classes with learners with PD were randomly selected. Subject teachers who taught in these classes were also randomly selected because they directly dealt with the learners and the researcher hoped that they would provide the required information. The Ministry of Education officer in-charge of special education in the Sub-County was also involved in the study because she is

concerned with all aspects of Special Needs Education in the Sub-County and was expected to provide key information in this study.

3.6.2 Sample Size

The sample size was 77. The sample was distributed as follows: 4 primary school head teachers and 2 secondary school principals, 10 primary and 6 secondary school assistant teachers, 1 Ministry of Education staff (Sub-County SNE Coordinator), 18 learners with physical disabilities, and 38 non-disabled learners.

Table 3.2 Sample size

Population	MoE Staff	%	Primary	%	Secondary	%	Sub-total	%
MoE Staff	1	100	-		-		1	
Principals	-		-		2	8	2	
Head teachers	-		4	10	-		4	
Teachers	-		10	24	4	17	14	
Learners with PD	-		15	83	3	17	18	
Non-disabled learners	-		28	10	10	7	38	
TOTAL	-		-		-		77	35

3.7 Research instruments

Questionnaires and an interview schedule developed by the researcher were used in data collection. The interview schedule was used to guide the conversation with the coordinator of SNE during data collection from the officer with regard to assessment of children with PD, follow up issues, cultural and environment factors. Questionnaires used to gather information from the teachers in the study

collected data on perceived effects of school environment on participation, retention, progression, and transition of learners with PD. Data on admission, dropout, and transition was got from the school heads using questionnaires. Details of the various types of questionnaires used are explained below.

3.7.1 Head Teachers' Questionnaires

The questionnaire for head teachers had five sections. Section (a) four questions: these sought to collect data on enrollment, dropout, and transition of learners with PD. Section (b) two questions: these gathered data on environmental factors affecting retention and transition, section (c) had one question to gather information on cultural factors influencing access, retention and transition. Section (d) had four questions on influence of teacher qualification on retention and transition, and section (e) one question on strategies used by schools to improve transition rates of learners with physical disabilities.

3.7.2 Interview Schedule for Key Informant

In order to understand the views and opinions of the key informant on the impact of culture and environment on transition of learners with PD, an interview schedule was used as a guide to ensure focus during the interviews. Questions were arranged as per the objectives of the study. Probing questions were asked to clarify and illuminate some of the interviewee's statements. Responses to the interview questions were recorded as the interview progressed in a note book.

3.7.3 Teachers' Questionnaires

The teachers' questionnaire had three parts. Part (1) had two questions on teacher's demographic data. Part (2) six questions to collect data on the teacher's opinion on effects of culture, environment and teacher competencies on the retention and transition of learners with physical disabilities and part three one question that provided data on teachers' suggestions on strategies of improving access, retention and transition of learners with physical disabilities.

3.7.4 Students' Questionnaire

The students' questionnaire had fourteen questions that collected data on the student's gender, grade level, whether disabled or not, cultural, environmental and instructional impediments faced by the student in the course of learning (for those with disabilities) and the student's opinion on how effects of culture and environment can be addressed to ensure their effective learning, progression and transition.

3.8 Pilot Study

The pilot study was conducted in two separate schools: Ngarenaro Primary and Bishop Louis Ngarenaro Secondary School both in Nyahururu. The two schools were suitable for the pilot study because they had similar characteristics with those of the main study. Furthermore, learners with PD who participated in the study from the two schools helped illuminate ambiguities in learners' questionnaires, determine the necessity of involving both primary and secondary

schools the main study, and in modification of the questions in line with the objectives of the study.

The researcher visited the schools on the days agreed upon with the head teachers. The head teacher, three teachers, one pupil with PD and five nondisabled pupils from Ngarenaro Primary volunteered to complete the questionnaires. The same number of respondents volunteered to complete the questionnaires at Bishop Louis Secondary School. The researcher then personally administered the tools to the respondents and collected them after they were completed. The aim of the pilot study was to refine the research instruments. The pilot study facilitated in determining validity, the feasibility of the instruments and avoiding ambiguity. A modification to some of the items in the questionnaires and deletion of others was done after the pilot study. For example item 1b in the head teachers' questionnaire was modified to include learners with PD only; item 2 section three was also changed to show specific values i.e. 1, 2, 3, 4 and over 5.

3.9.1 Validity

Bell and Opie (2002), define validity as the design of research to provide credible conclusions, whether the evidence which the research offers can bear the weight of the interpretation that is put on it. Silverman (2011), defines validity as the level to which an account accurately represents the social phenomena to which it refers. It deals with the notion that what one says was observed is in fact, what really happened. The content validity of the research instruments used in this study was

ascertained through expert advice from two lecturers in the department of special needs education by ensuring that the items in the research instruments addressed issues under study and during pilot study.

3.9.2 Reliability

Reliability of an instrument is the consistency of its producing dependable results. According to Mugenda and Mugenda (1999), reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials. To test for the reliability of the instruments, test-retest technique was done. This method was used to ascertain the consistency of the items to generate dependable results. The research instruments were administered twice in the pilot schools within an interval of two weeks. After administering the questionnaires to two head teachers, six teachers and ten students in the two pilot schools in the first week, the responses were scored and analyzed manually. In the second week the same instruments were administered to the same respondents and responses scored and analyzed. Reliability was calculated using the Spearman's rank order correlation coefficient and a correlation of 0.812 was found indicating a very strong correlation. A principal of one of the participating schools offered to respond to interview schedule items which helped in removing ambiguities. The items were therefore noted to be reliable for data collection.

3.10 Data collection techniques

The researcher sought permission from the Ministry of Education through the DEO Nyahururu to carry out the study in Nyahururu Sub-County. Visits to the sampled schools to make necessary arrangements with the administration on when and how to carry out the research were made. During these visits explanation on the purpose and confidentiality of information given by the respondents was given. The researcher used these initial visits to give questionnaires to the head teachers to fill in and any unclear areas were explained. All head teachers questionnaires were filled in by the concerned officers in their offices in the presence of the researcher and collected the same day. The researcher visited each of the schools on the day agreed upon with the administration. Teachers were issued with questionnaires which they completed during the mid-morning tea break in the school staffrooms. Where explanation was required, the same was given by the researcher. The questionnaires were collected immediately on being filled. Students' questionnaires were administered to students by the researcher with assistance of class teachers/masters/mistresses in the afternoon on the same day. Those of the teachers were collect during the last lesson. An interview with the SNE Coordinator in Nyahururu Sub-County was held in the officer's office on a Thursday afternoon from 3.10 pm to about 4.45 pm. The researcher took notes as the interview proceeded and then gave the same to the interviewee to confirm they were in line with her responses.

3.11 Data analysis

Green, Willis, Hughes, Small, Welch, Gibbs and Daly (2007), posit that data analysis process facilitates the examination of the data collected in order to provide a rational account of what was found to enable the researcher to reach conclusions. The data collected in the study was both qualitative and quantitative in nature. The interview and open-ended questions produced qualitative data. All responses from the interview and open ended questions were grouped together for initial coding. The researcher developed codes that aided in analyzing responses to open ended questions. Quantitative data were analyzed using descriptive statistics. Using descriptive statistics enables the researcher to meaningfully describe a distribution of scores or measurement using a few indices or statistics (Mugenda & Mugenda, 1999). Data in this study are presented through percentages, frequency tables, pie charts and bar graphs.

3.12.1 Logistical Considerations

Before proceeding to collect data, the researcher got an authorization letter from department of Special Needs Education and an introductory letter from the Graduate School of Kenyatta University. The introductory letter was used to acquire a research permit from the National Commission for Science, Technology and Innovation (NACOSTI). After getting a research permit from NACOSTI, permission from the County Commissioner and the DEO to carry out the study was sought.

3.12.2 Ethical Considerations

The researcher, using introductory letter from the department of SNE and authorization letters from Deputy County Commissioner and Sub-County Education Officer Nyahururu sought consent from head teachers and the respondents of sampled schools and further ensured that all the respondents were assured of confidentiality and anonymity of data collected and data collection process. The head teachers were requested to seek consent of participation of the learners on behalf of their parents in the presence of the researcher. The participants were informed that all information given would only be used for the purpose of the research and only privy to the researcher. Further, they were informed that any data collected and was unused would be destroyed. Code names would be used to conceal information of sources and for confidentiality. All questionnaires would be placed under lock and after analyzing them they would be burned.

CHAPTER FOUR

PRESENTATION OF FINDINGS, INTERPRETATION AND DISCUSSION

4.1 Introduction

In the previous chapter, a detailed discussion of research methodology has been done. The purpose of this study was to determine cultural and environmental factors impeding transition rate of learners with physical disabilities from primary to secondary schools in Nyahururu Sub-County of Laikipia County. This chapter describes the analysis of data obtained from questionnaires and an interview with Ministry of Education official in charge of special needs education in the Sub-County. The research study sought to:

- i. Determine environmental barriers faced by learners with PD in public primary schools in Nyahururu Sub-County.
- ii. Find out cultural factors hindering transition of learners with physical disabilities from primary to secondary schools in Nyahururu Sub-County.
- iii. Find out teacher training in SNE in meeting educational needs of learners with physical disabilities in Nyahururu Sub-County.
- iv. Determine school interventions used to counter cultural and environmental barriers to improve transition rates of learners with physical disabilities in Nyahururu Sub-County.

Data collection involved six schools-two secondary and four primary schools. Key informants included six head teachers, one Ministry of Education official, fourteen teachers, eighteen learners with PD and thirty-eight nondisabled learners. The first section of this chapter presents general and demographic information of all the respondents plus enrollment, dropout, and transition rates of learners with PD from the four sampled primary schools. The second section presents analysis of data sequentially as per the objectives as well as the implications of the findings. The findings of the study were analyzed using descriptive statistics.

4.2 General and Demographic Information

4.2.1 Response Rate

Seventy-six questionnaires were distributed to schools as follows: six to head teachers, to teachers (14), learners with PD (18) and nondisabled students (38). The questionnaires had a hundred percent return rate since the researcher was in the schools when they were filled. The tabulation illustrates both issue and return rate of the questionnaires. The schools are coded as SS and PP. SS refers to secondary and PS primary respectively school.

Table 4.1: Response Rate for Questionnaires (n=76)

School	Questionnaires	Issued	Questionnaires	Returned
SS1	8	10.5%	8	10.5%
SS2	11	14.5%	11	14.5%
PS1	13	17.1%	13	17.1%
PS2	18	23.7%	18	23.7%
PS3	14	18.4%	14	18.4%
PS4	12	15.8%	12	15.8%
TOTAL	76	100%	76	100%

Source: Researcher Data (2015)

Key: SS1==secondary school one, SS2== secondary school two, PS1==Primary school one, PS2== Primary School two, PS3== primary school three and PS4==Primary school four.

Table 4.2 shows how the questionnaires were distributed to the various schools and respondent groups.

Table 4.2: Questionnaires Distribution to Respondents (n=76)

School	H/teachers	%	LWPD	%	NDLs	%	Sub-total	%
SS1	1	1.32%	1	1.32%	4	5.3%	8	10.5%
SS2	1	1.32%	2	2.6%	6	7.9%	11	14.5%
PS1	1	1.32%	3	4%	7	9.2%	13	17.1%
PS2	1	1.32%	5	6.58%	8	10.5%	18	23.68%
PS3	1	1.32%	4	5.3%	7	9.2%	14	18.42%
PS4	1	1.32%	3	4%	6	7.9%	12	15.8%
TOTAL							76	100%

Source: Researcher Data (2015)

Non-disabled learners (NDLs) comprised the largest group of respondents 49% followed by learners with physical disabilities (LWPD) 24%, 18% teachers and finally 8% head teachers.

4.2.2 Demographic Information of Respondents

To achieve the purpose of this study, respondents' demographic information was analyzed which included: gender, professional qualification, teaching experience and length of stay in current station with regard to teachers and academic level for both the learners and teachers.

4.2.2.1: Gender of Respondents

Table 4.3 shows gender distribution of the respondents.

Table 4.3: Gender of Respondents

School	H/teachers	Teachers	LWPD	NDL	MoE Staff
Male	2 33.3%	8 57%	11 61%	20 52.6%	0 0%
Female	4 67.7%	6 43%	7 39%	18 47.4%	1 100%
TOTAL	6 100%	14 100%	18 100%	38 100%	1 100%

Source: Research Data (2015)

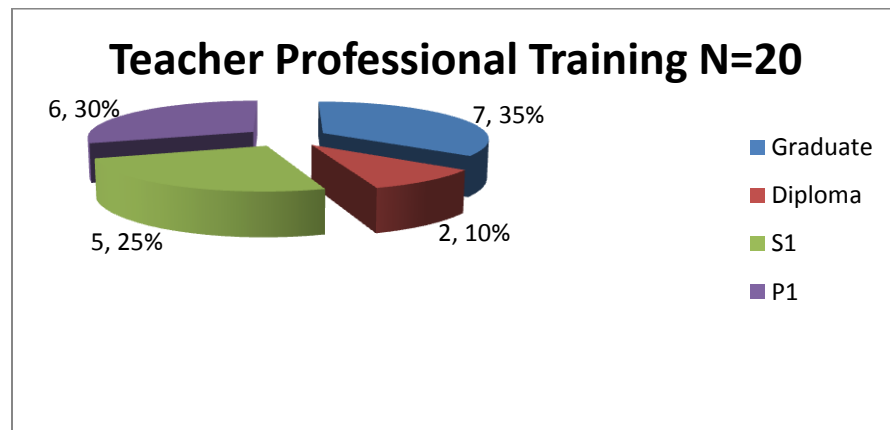
Secondary school principals were one male and one female whilst those from primary were three females and a male. As regards teachers, there were eight male and six female teacher respondents. Conversely, majority of head teacher respondents were female implying that more female teachers are taking up leadership positions. On the other hand, of the eighteen learners with PD, eleven

were boys and seven girls. The nondisabled learners were twenty boys and eighteen girls.

4.2.2.2: Teachers Academic and Professional Qualification

Most of the teacher respondents were graduates although some of them had initially trained as (P1). P1 teachers were 30% followed by S1 teachers (25%) who had been promoted on merit from P1 grade. Those with a diploma comprised 10%. Out of all the twenty teachers (principals and teachers) only three (15%) had SNE training.

Figure 4.1: Teacher Academic and Professional Qualification



Source: Research Data 2015

4.2.2.3: Teaching Duration in the Current Station

Majority of the teachers (93%) had taught in their current teaching stations for five years and above implying that they were acquainted to their schools and the schools' set traditions with regard to enrollment, retention, progression and

transition of learners with disabilities. Out of all the twenty teachers (principals and assistant teachers) only three (15%) had Special Needs Education training.

Table 4.4: Duration of Teaching in Current School

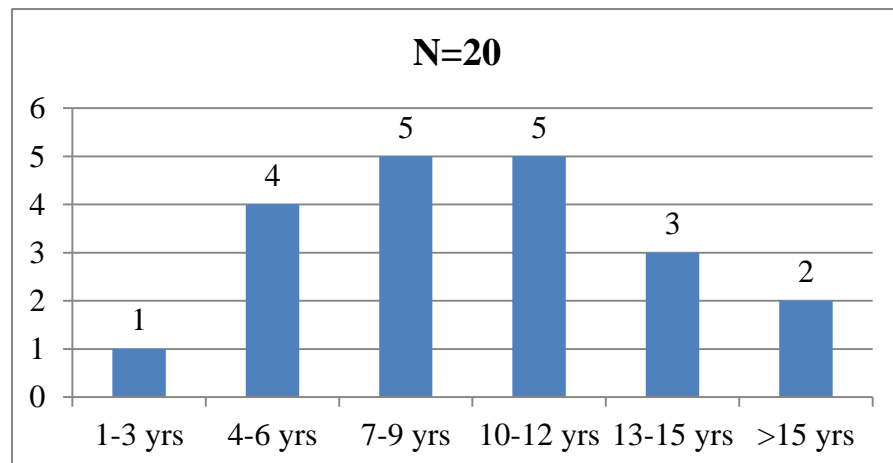
Period in	Frequency	Percentage
Under 1 year		
1-4 years	1	7
5-9 years	1	7
>10 years	12	86
TOTAL	14	100

Source: Research Data 2015

4.2.2.4: Teaching Experience

Majority of the teachers 19 (95%) had a teaching experience exceeding three years. Only one respondent had a teaching experience of between 1-3 years.

Figure 4.2: Teachers Teaching Experience



Source: Research Data 2015

4.2.2.5: Effects of Teacher Training, Experience and Duration of Stay in School on Transition

The study findings indicated that all teachers were professionally qualified to teach in regular schools. However, only 3 (0.89%) had SNE training within the teacher establishment in the six schools. At individual school level, 11.76% were in primary and 5.6% in secondary schools respectively. This finding suggests that teachers are lacking in instructional skills ideal for mitigating for the wide range of learning needs of individual learners arising from their disabling conditions. Most of the teachers without training in SNE expressed a feeling of inadequacy when teaching learners with PD. It further suggests that too few teachers are well equipped to provide individualized instruction to learners with special education needs in their classrooms implying that the learners lack help (**Support**) necessary to develop self-image (**Self**) which may lead to their developing a sense of social isolation and influencing their transition rates. In addition, it implies that the learner is not achieving the same quality of education due to the system's failure to respond to the needs of students with disabilities. Berthoud (2006), supports these findings when he observes that the education systems world over tend to fail in empowering young people with disabilities to make successful transitions to post-compulsory (primary school) education levels, to higher education and into employment.

4.2.2.6: Gender and Age Barriers on Transition

The study found out that there were more male learners with PD than females. This contrasted sharply with the almost one to one ratio among the nondisabled learners. Furthermore, as discussed later most of these learners were above sixteen years and still in primary school. Some of the learners with PD with advanced ages were reported to drop out due to feelings of being socially unfit among younger classmates. These findings agree with those of UNESCO (2009), which estimate the number of children aged (0-14 years) living with disabilities as ranging between 93 and 150 million of whom only 5% are in school. However, over 80% of their nondisabled peers at this age had transitioned to secondary implying that many of those with PD may have enrolled in school at an advanced age.

The researcher noted from the enrollment data that there was gender disparity which may be attributed to society's attitudes towards disability. However, Joshi (2013), says that in most low-income countries, girls are less likely to be sent to school than boys and even once in school, they are more likely to drop out early for a range of reasons which include disability and perceived lack of job opportunities among others.

4.2.2.7: Age Distribution of Learners

Item two in the learners questionnaire sought to find out the ages of learner respondents. Table 4.5 shows age distribution of all the learners.

Table 4.5: Age Distribution of Learners (n=56)

Age	LWPDs Percent		NDLs Percent	
8-12 years	2	11%	3	8%
13-15 years	6	33%	25	66%
Over 16 years	10	56%	10	26%
TOTAL	18	100%	38	100%

Source: Research Data (2015)

Majority of learners with PD (56%) were over sixteen years despite the fact that only 17% were in secondary school. Six (33%) were between 13-15 years and 11% were aged between 8-12 years. In contrast, only 10(26%) of the nondisabled were over 16 years with a majority 25(66%) being in the 13-15years age bracket. Three (8%) of the nondisabled were aged 8-12 years. Eighty percent of the nondisabled aged over sixteen years had either transitioned to secondary schools or joined youth polytechnics. However, the researcher could not ascertain the reason for the other 20% being in primary and not in secondary schools.

In addition, the study found out that the number of those with PD graduating to class eight also declined sharply. This was attributed to some extent to the nature of disability and to a larger extent lack of support within the learning environment (situation) that was conducive to meeting the learning needs of those with disabilities. Some of the teachers in response to item six on other factors affecting transition explained that some of the learners with disabilities often felt out of

place on reaching adolescence especially if they were afraid of parting with their acquaintances and were to seek assistance from strangers. They felt the government would support regular schools with such learners by providing qualified teacher-helpers. This staff would assist in offering specialized services to learners and hence ensure retention and transition.

4.2.2.8: Learners Academic Levels

Item three in the learners questionnaire sought information on their academic levels. Table 4.6 shows the academic levels of these respondents.

Table 4.6: Distribution of Learners Academic Levels

Class	LWPD	NDL	Percent
Class 4	2	4	10.7%
Class 5	3	9	21.4%
Class 6	4	6	17.9%
Class 7	4	5	16.1%
Class 8	2	4	10.7%
Form 1	0	0	0.0%
Form 2	2	7	16.1%
Form 3	1	3	7.1%
Form 4	0	0	0.0%
TOTAL	18	38	100%

Source: Research Data (2015)

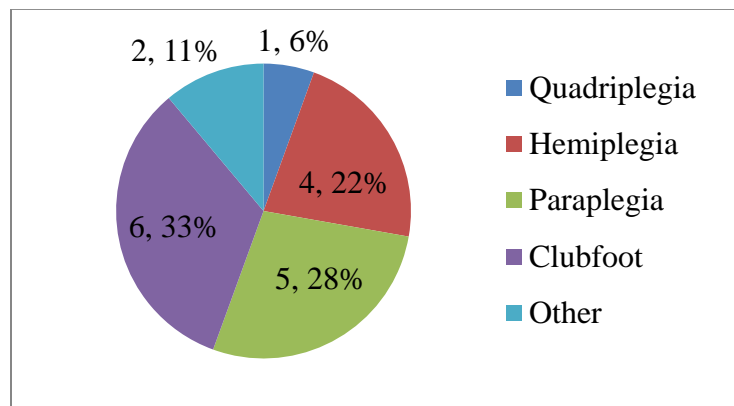
Eighty-seven percent of the learners with PD were from primary schools. Of these 73% were from classes five to seven. The rest (27%) were from classes four and eight. Only three (17%) were from secondary schools. Of the respondents in secondary schools two were in form two and one in form three. Berthoud (2006), concurs with these findings when he says that there is widespread evidence of

equality gaps between disabled and non-disabled young people in relation to educational progression, education achievement and transitional outcome all over the world. On the other hand, nondisabled respondents were fairly evenly distributed with a majority of those in primary (71%) being from class five to seven and 29% sampled from class four and eight. Majority of respondents in secondary schools (70%) were from form two whilst the rest were from form three. Secondary school SS1 had an even distribution of nondisabled respondents with each form providing three respondents. On the other hand, SS2 had four respondents drawn from form two.

4.2.2.9: Types of Disability of Respondents

Item four required learners to state whether they had a disability or not. Figure 4.3 below shows physical disabilities indicated by the respondents.

Figure 4:3: Types of Disabilities of Respondents



Source: Researcher Data (2015)

Most prevalent condition was clubfoot comprising a third of all the respondents. Other disabling conditions arising from cerebral palsy included: twenty-eight percent paraplegics, twenty-two percent hemiplegics, and six percent quadriplegics. Eleven percent had mild intellectual disability.

4.2.2.10: Enrollment of Learners with Physical Disabilities

Question 1b in the head teachers questionnaire sought to find out the enrollment trends in the schools over the last eight years. Table 4.7 shows the findings.

Table 4.7: Enrollment of Learners with PD between 2008 and 2015

School	Gender	2008	2009	2010	2011	2012	2013	2014	2015	Total
PS2	Boys	0	1	2	2	2	2	1	2	12
	Girls	2	0	0	1	1	2	2	1	9
PS3	Boys	1	1	1	1	0	1	0	0	5
	Girls	0	0	1	0	1	0	2	1	5
PS4	Boys	2	0	0	0	2	1	0	1	6
	Girls	0	0	0	2	0	0	2	0	4
PS1	Boys	1	0	0	1	1	0	1	0	4
	Girls	1	1	0	0	1	1	1	0	5
SS1	Boys	0	0	0	0	0	1	0	0	1
	Girls	0	0	0	1	0	0	1	0	2
SS2.	Boys	0	0	0	0	1	0	0	0	1
	Girls	0	0	0	0	0	0	1	0	1
Sub-Total		7	3	4	8	9	8	11	5	55

Source: Research Data (2015)

The data indicate that fifty-five learners with PD have enrolled in the sampled schools over the last eight years: (29, 53%) boys and (26, 47%) girls respectively.

This compares with the Sub-County SNE coordinator's assertion that Education

Assessment and Resource Centres (EARC) in the Sub-County have assessed 243 children with physical disabilities over the same period.

4.2.2.11: Dropout Rates

Question 1c sought to find out from the Head teachers the number of learners with PD that had dropped out between 2009 and 2015.

Table 4.8: Dropout Rates (2009-2015)

School	Gender	2009	2010	2011	2012	2013	2014	2015	Total
PS2	Boys	0	0	0	2	1	1	2	6
	Girls	0	0	0	0	0	2	1	3
PS3.	Boys	0	0	1	0	0	1	0	2
	Girls	0	0	0	1	2	1	1	5
PS4	Boys	0	0	0	0	0	1	0	1
	Girls	0	0	0	0	1	0	0	1
PS1	Boys	0	0	0	0	1	0	1	2
	Girls	0	0	0	0	1	2	0	3
SS1	Boys	0	0	0	0	0	0	0	0
	Girls	0	0	0	0	0	0	0	0
SS2	Boys	0	0	0	0	0	0	0	0
	Girls	0	0	0	0	0	0	0	0
Sub-total		0	0	1	3	6	8	5	23

Source: Research Data (2015)

A total of 23 learners dropped out of school between 2011 and 2015 with a majority dropping out in 2014. More girls than boys dropped out- 52% and 48% respectively. The study found out that only one learner did drop out of school between 2009 and 2011. However, a trend of dropping out ensued from 2012 with almost 41.82% of the total enrolment dropping out by 2015. This finding indicated that number of learners expected to transition to secondary declined

sharply. In addition, the data indicated that more boys than girls dropped out in primary school PS2 (6 against 3). On the other hand, in primary schools PS3 and PS1 more girls had dropped out 5 and 3 respectively.

Three head teachers, responding to item 3 on the level at which most dropouts were noted indicated that dropping out was common in classes five to seven whilst one indicated that it would occur at any level. This implies that very few learners with PD are either motivated to keep in school or prepared to transition except those who are strong willed and focused to learn albeit impeding circumstances.

4.2.2.12: Transition Rates of Learners with PD between 2009 and 2014

Primary schools head teachers indicated that only 5 (1.52%) learners with PD had managed to graduate to secondary schools in the last six years. Table 4.9 shows distribution of learner transition.

Table 4.9: Transition of Learners with PD to Secondary Schools

School	Gender	2009	2010	2011	2012	2013	2014	Total
PS2	Boys	0	0	0	0	0	0	0
	Girls	0	0	0	0	0	0	0
PS3	Boys	0	1	0	0	1	0	2
	Girls	0	0	0	0	0	0	0
PS4	Boys	0	0	0	1	0	0	1
	Girls	0	0	0	0	1	0	1
PS1	Boys	0	0	0	0	0	0	0
	Girls	0	0	0	0	0	1	1
Sub-total		0	1	0	1	2	1	5

Source: Research Data (2015)

4.3: Environmental Barriers Faced By Learners with Physical Disabilities in Public Schools

The first objective of this study was to determine environmental barriers encountered by learners with physical disabilities that impede their access, retention, progression and eventual transition from primary to secondary schools in Nyahururu Sub-County. All respondents but learners without physical disabilities were to indicate the environmental barriers they felt learners with PD faced which may influence their transition. Table 4.10 shows head teachers' responses.

Table 4.10: Head teachers Responses on environmental barriers faced by learners with PD

	Distance	Poor roads	No attention	Non-adapted curriculum	Un adapted toilets	Inaccessible classrooms	unpaved pathways	No related services	Narrow pathways	Congested classrooms
Very high	6	5	6	3	6	3	2	6	3	5
H i g h	0	1	0	3	0	3	4	0	3	1
L o w	0	0	0	0	0	0	0	0	0	0
Very Low	0	0	0	0	0	0	0	0	0	0

Source: Research Data (2015)

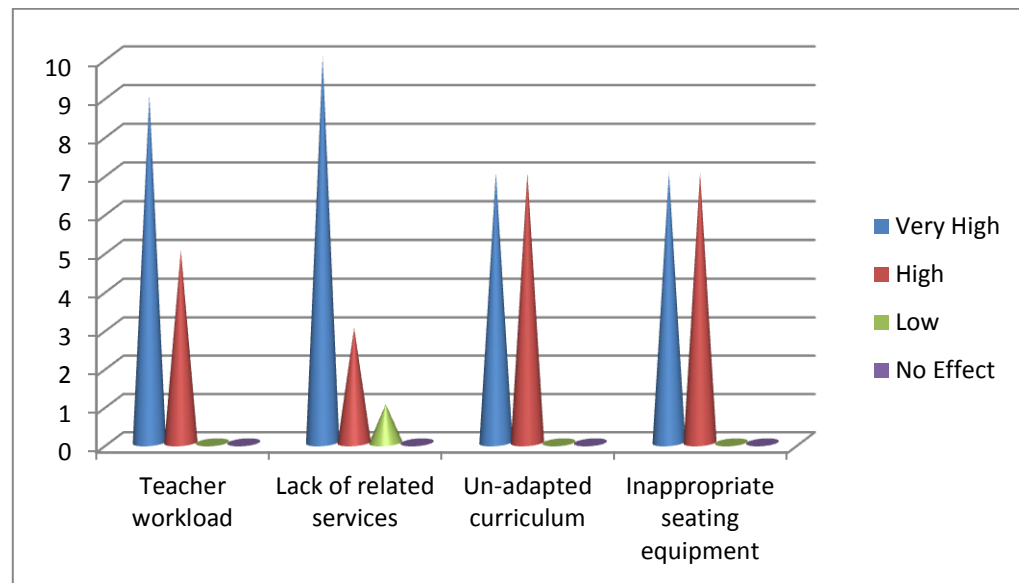
All the 6 head teachers identified distance, lack of individualized instruction to learners with PD by teachers, un-adapted toilets and other related school infrastructure, and lack of related services such as occupational and physiotherapy as major environmental impediments to transition of these learners.

In addition, 5 (83%) of the respondents identified poor roads on undulating and unlevelled landscapes and congested classrooms as contributing very highly in many of the learners with PD dropping out of school. A half (3, 50%) of the head teachers viewed lack of adapted curriculum, unpaved pathways and narrow paths

as contributing very highly to low transition rates whilst the other half indicated their effect as being high.

Assistant teachers' responses to the item on environmental factors impeding transition of learners with PD are as shown in figure 4.4.

Figure 4.4: Teachers' Responses on Environmental impediments to transition of PD



Source: Research Data (2015)

Majority of the teachers 8 (57%), indicated that large and congested classes contributed highly to low rates of transition of learners with PD from primary to secondary schools whilst 4 (29%), viewed this factor as having had very high effects on the number that transitioned. Only 2 (14%), of the respondents were of the opinion that this factor had low influence on transition of these learners. Large

and congested classes deny these learners the attention they require from the teachers who devote more time to typical learners who are the majority. Seven (50%), of the respondents indicated inaccessible classrooms as the greatest barrier to transition to learners with PD. They observed that when classrooms were constructed the needs of learners with disabilities were not considered. Narrow doorways and location of classrooms on sloppy grounds requiring steps to access them often act as major barriers to learners with PD. Of the remaining seven respondents, 5 (36%) indicated that inaccessible classrooms highly influenced transition of learners with PD whilst the other 2 (14%) said it had low effect.

This study further sought to find out from the teachers the impact of lack of adapted toilets for use by learners with PD on their transition to secondary schools. Half (7, 50%), of the respondents indicated that an un-adapted toilets very highly influenced retention and transition of these learners whilst 6 (43%), indicated their effects on transition as high. However, 1(7%), of the respondents submitted that this factor had no effect on transition rates.

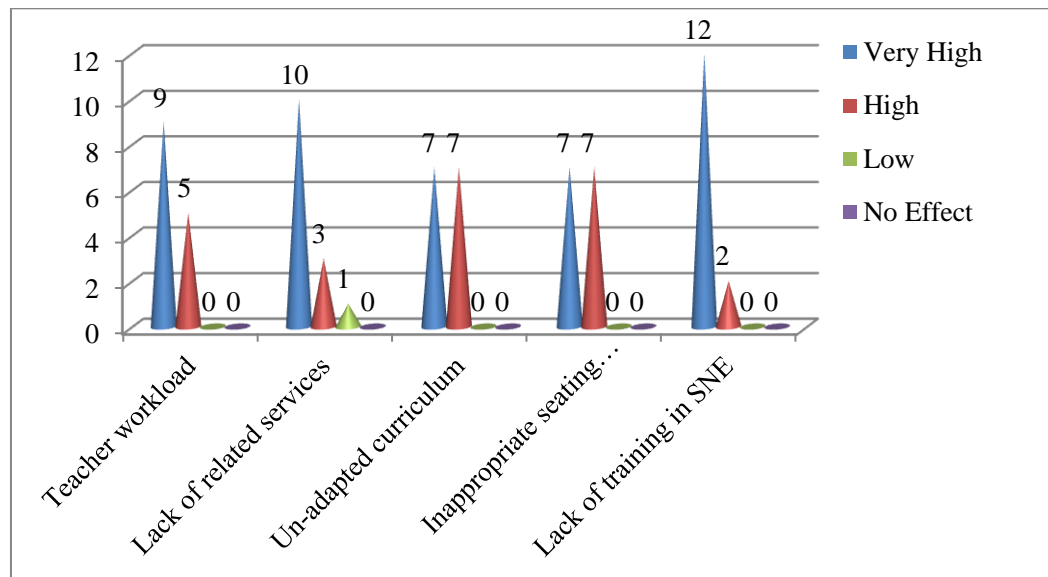
Majority (9, 64%), of the respondents submitted that their generally poor school terrains very highly affected transition rates since those learners with more serious mobility problems had difficulties manoeuvring the compounds. The other 4 (29%), submitted that it had somewhat high influence. Nonetheless, 1(7%), of the respondents felt it had low effects on the transition of these learners.

The Sub-County SNE coordinator in support of the teachers opinion further explained to the researcher that it was often very hard for the Assessment Centres to recommend placement of some of the children with PS considering the nature and severity of their disabilities with regard to schools' both built up and non-built environment. She submitted that most schools with exception to those naturally endowed with flat compounds need environmental modifications to include learners with PD.

4.3.1: Instructional Barriers in the Learning Environment to Transition

Item 5b in the teachers' questionnaire also sought to find out from these respondents the influence of instructional barriers in the teaching/learning environment to transition. Their responses are illustrated in figure 4.5.

Figure 4.5: Instructional impediments



Source: Research Data (2015)

Over 60% of the respondents indicated teacher workload as contributing very highly to low transition rates because learners hardly received individualized attention from the teachers. *“Those who made it through primary school worked very hard to compete with their typically developing peers,”* was a comment submitted by a teacher from one of the primary schools. Slightly over 70% (10) of the respondents viewed lack of related services as a major contributor to low transition rates of these learners. A further 3 (21%) of the respondents rated it as having high effects with 1(7%) of the respondents rating it as having low effect.

Majority (12, 86%), of the teachers cited lack of training in SNE as having very high influence on transition rates while the rest (2, 14%), indicated that it only contributes highly to low transition rates.

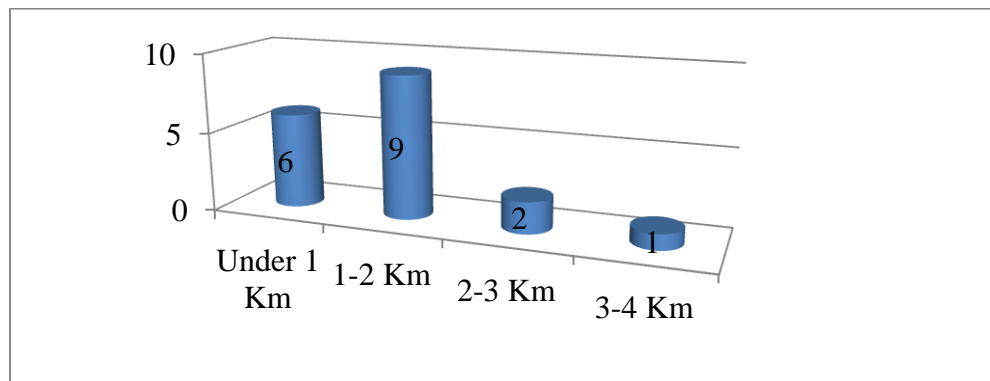
Half (7, 50%), of the respondents indicated lack of adapted curriculum as influencing low retention; progression and transition very highly while the other half felt it only had high effects on transition. On the other hand, inappropriate seating equipment were indicated by one half 7 (50%), of the respondents as very high contributors to dropout and low transition rates while the other rated their effects as high. Two respondents from school PS2 indicated having often noticed inappropriate seating equipment as causing weariness and discomfort in learners on wheelchairs. They indicated that some of these learners would fidget and change their posture repeatedly when tired. If the problem remained unresolved, the behaviour and learning outcomes of the child due to low concentration were

affected often leading to dropping out of school. The effect of this was reduced transition rates.

The study further found out that majority of the teachers felt less obliged to teach learners with PD for lack of training in SNE. Teachers showed preference for these learners' placement in special institutions or they be integrated so long as they showed ability to perform at par with their nondisabled peers without too much effort from their teachers. This implies that most regular teachers have a feeling of inadequacy when teaching learners with PD.

Items 10 and 11 in the pupils' questionnaire sought to find out from the learners with physical disabilities what environmental factors acted as impediments to their progression and transition in education. Figure 4.6 shows the responses of the learners with regard to approximate distances covered by the learners from their homes to school.

Figure 4.6: Learner's with PD Approximate Distance from Home to School



Source: Research Data 2015

Half (9, 50%) of the respondents indicated that they cover 1-2 Km to get to school, 6 (33%) under a Km, 2 (11%) 2-3 Km whilst 1 (6%) travels 3-4 Km.

Table 4.11 illustrates the modes of getting to schools by the learners. All the 3 learners with PD in secondary school like their 14 (93%) colleagues in primary either walked or boarded public transport to school. One of the respondents (who travelled furthest) used private or public means to get to school.

Table 4.11: Means of Getting To School by Learners with PDs

Responses	(f) Secondary (n=3)	(f) Primary (n=15)	Sub-total	Percent
Use school bus	0	0	0	0%
Use public transport	3	15	18	100%
Walk to and from school	3	14	17	93.3%
Use private means	0	1	1	6.7%
TOTAL	3	15	18	100%

Source: Research Data (2015)

The findings showed that almost all of the learners depended on public transport to get to school and when this failed walking was not optional. One learner was dropped by her parents at school in the morning and picked in the evening. This learner said that she often failed to report to school if her parents were unable to drop her there.

Table 4.12 illustrates learners' responses to challenges posed by distance and undependable means of transport.

Table 4.12: Challenges of Getting To School by Learners with PD

Learners Responses	Frequency	Percent
Being late due to harsh weather and unreliable transport	17	93.3%
Being late at the road by uncaring drivers	9	50%
Lack of assistance to get to or fro school	4	22.2%
Absenteeism due to harsh weather conditions	3	16.7%
Fatigue	4	22.2%
Inability to compete effectively with non-disabled due to fatigue	4	22.2%
Teachers assuming I am lazy or rude	2	11.1%
Suffer from colds very often because of walking to school very early	2	11.1%
Waiting for long or someone from home to pick me up	2	11.1%
Wheeling my wheelchair uphill to school is often painful since it results in blisters which take long to heal	2	11.1%

Source: Research Data 2015

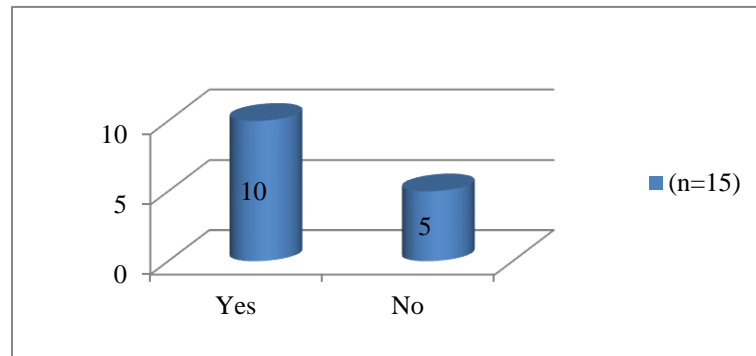
Seventeen (93.3%), of the learners complained of getting to school late especially during wet seasons. Half (9, 50%), submitted that they were often left at the

roadside by uncaring 'Matatu' drivers. An equal number of respondents (4, 22.2%), indicated having difficulties in negotiating muddy paths and suffering from fatigue, waiting for long to get help from relatives or friends or lack of bus fare, and/or inability to compete effectively with nondisabled peers due to fatigue. Six (33.3%), of the respondents indicated that walking to school was a task that left them very tired. The rainy season to them heralded a most trying moment in their lives in school to a point that some of them detested being in school.

Another 4 (22.2%), of the respondents attributed their inability to compete effectively with their nondisabled colleagues to absence from class and fatigue if they walked to school. Another 3 (17%) missed school out of harsh terrain made worse by wet weather making it difficult for them to maneuver their way. Some 2 (11%), of the respondents indicated suffering colds while an equal number expressed having blisters in their hands due to wheeling of their wheelchairs in muddy situations.

On the item on challenges arising from distance to school and its' influence on these learners desire to join secondary schools; two thirds of the respondents affirmed they would transition whilst the other third indicated they would not as figure 4.7 shows.

Figure 4.7: Influence of Distance on Desire to Join Secondary school



Source: Research data (2015)

The implications of the study findings were that majority of the learners would join secondary schools if transport was available for fear of lateness absenteeism and fatigue.

Lateness, fatigue and frequent absenteeism arising from harsh weather conditions or being left by the roadside by uncaring ‘Matatu’ drivers often leads to low self-esteem and eventual dropout. A study by Glennerster and Kremer (2011), support this finding when they say that the issue of distance and transportation poses a problem for some learners with disabilities when transportation is unaffordable and the distance to school is too great to walk, which renders the possibility of attending school impossible.

Item 9 in the students questionnaire sought to find out from those with PD environmental barriers they encountered in school. The findings are shown in Table 4.13.

Table 4.13: Environmental challenges faced by those with PD

Responses	Frequency	Percent
Arrow paths to toilets and classrooms	3	20.0%
Narrow doorways to classrooms and toilets	2	13.3%
Doorsteps	2	13.3%
Toilets not adapted for learners with disabilities	3	20.0%
Muddy paths during wet seasons	2	13.3%
Tall grass in the play fields	2	13.3%
Steep and slippery paths to some of the classrooms	1	6.7%

Source: Research Data (2015)

Cumulatively, 10(66.6%) of the respondents with PD indicated narrow paths to toilets and classrooms, dirty and un-adapted toilets, narrow doorways to classrooms and toilets for wheelchair users, doorsteps, muddy paths during the wet seasons and tall grass in the play fields as major barriers. About 7% of the respondents indicated steps on steep sloppy grounds and slippery paths to some of the classrooms as barriers necessitating help from the nondisabled learners that was not always forthcoming.

These findings suggest that those learners who cannot surmount these challenges often drop out of school. In addition, if these challenges are coupled with lack of individualized instruction, congested classrooms and heavy teacher workload. Many learners with PD who cannot cope on their own often drop out of school leading to low transition rates.

Michael (2013), in her research on access of education to children with disabilities in Tanzania supports these findings by identifying unfriendly physical environment such as dirty toilets, and many steps around the school compounds, among other challenges as impacting on access of education for those with disabilities. Further, EEN (2003), posit that each student with physical disabilities is unique with different learning and social needs and goes on to recommend that all environments and experiences be set ready for all children rather than target the needs of a homogenized ‘middle ground’ or ‘one size fit all’. It argues for instance that those with PD are likely to face difficulties in using inappropriate or inaccessible toilet facilities.

4.4: Influence of Cultural Beliefs and Attitudes on transition of Learners with PD

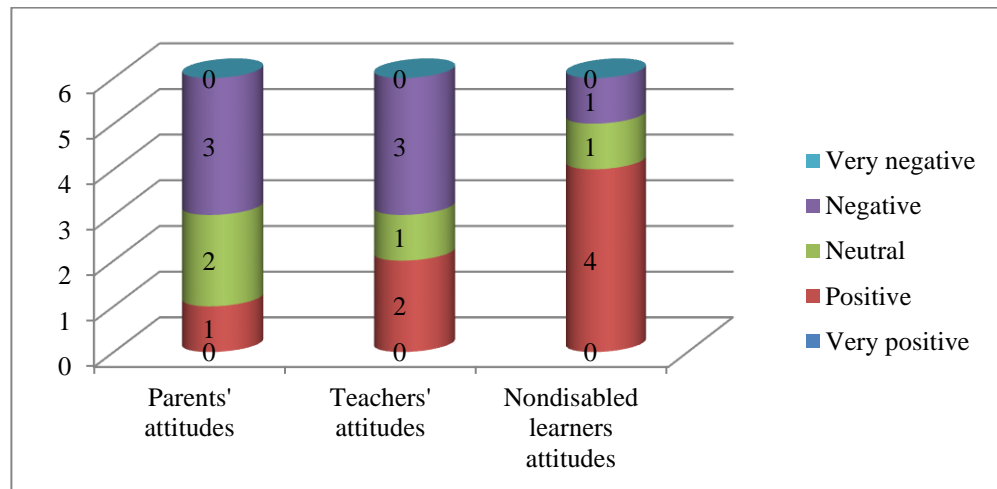
The second objective of this study sought to determine to what extent cultural beliefs and attitudes impede transition of learners with physical disabilities from primary to secondary schools in Nyahururu Sub-County.

4.4.1: School Community’s Attitudes Towards those with PD

Section Two of the head teachers questionnaire sought data on the extent to which different cultural beliefs and attitudes held by the different groups of people in their school’s community towards disability influenced access to education, retention, progression and transition of learners with PD from primary to secondary schools in Nyahururu Sub-County.

Item one in this section sought to find out head teachers opinions on attitudes held by different members of their schools' communities towards those with disabilities. Figure 4.8 shows the responses.

Figure 4.8: School Community's Attitudes Towards those with PD



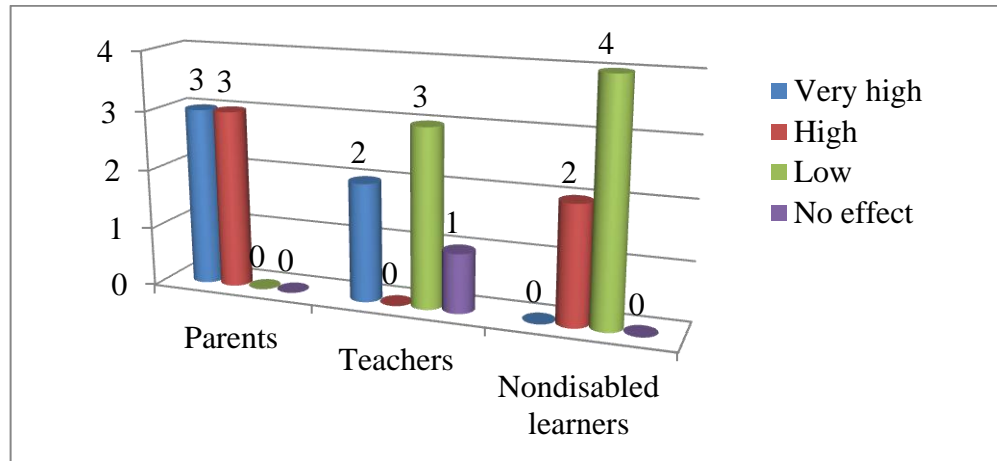
Source: Research Data (2015)

Half (3, 50%), of the head teachers thought parents of learners with PD as well as teachers had negative attitudes towards those with PD. Only 1 (16.7%), respondent felt that nondisabled learners had negative attitudes towards their peers with PD. Nondisabled learners were indicated as having positive attitudes by 4 (66.7%) of the respondents. A third (2, 33.3%), felt parents attitudes were neutral whilst 1 (16.7%) thought that both teachers and nondisabled learners were neutral. On the other hand, 2 (33.3%) regarded teachers attitudes as positive. The findings indicated that both parents and teachers attitudes were somewhat

negative contrary to those of nondisabled learners which were cordial. On the other hand, 6 (43%) of the 14 teacher respondents felt parents have negative attitudes toward their children with PD which highly influence the latter's transition rates. Another 5 (36%) were of the view that parents negative attitudes very highly influenced transition. The remaining 3 (21%) indicated that it (parents attitudes) had low effects on transition.

Item two had eleven parts. The first five sought data on the impact of attitudes on transition. The other six sought data on beliefs and their influence on transition. Figure 4.9 illustrates head teachers responses with regard to influence of negative attitudes on transtion.

Figure 4.9: Impact of Attitudes of Parents, Teachers and NDL on Transition



Source: Research Data (2015)

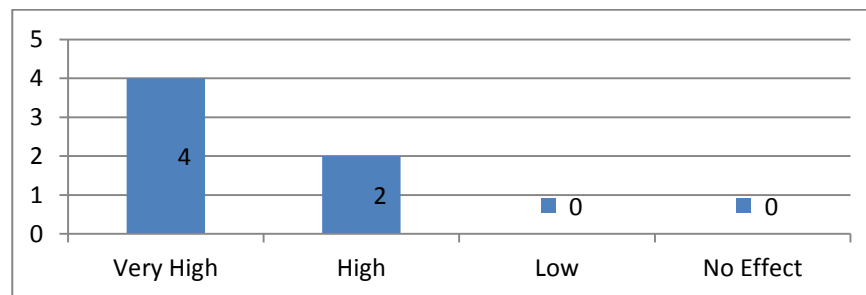
Half (3, 50%), of the head teachers indicated transition as being very highly influenced by parental negative attitudes expressed through failure to honour their obligations towards meeting their children’s needs in school. This failure was attributed to preference for the nondisabled children’s education over that of those with disability. The other half felt their effects were simply high. On the other hand, 3 (50%) of the respondents felt teachers’ negative attitudes towards those with PD had low influence on transition whilst 2 (33.3%) felt they had very high influence. However, 1(16.7%) respondent indicated that teachers’ negative attitudes had no influence on transition of these learners.

As regards, nondisabled learners’ negative attitudes toward their peers with PD and the latter group’s transition, 4 (67%) of the head teachers rated their effect as low. The rest thought they had some effect indicating that the relationship

between nondisabled learners and those with PD was cordial. The implications of the findings were that parents and teacher attitudes contributed significantly to low transition rates of learners with PD. Stodden and Dowrick (2000), affirm these findings in their research findings where they posit that patterns of relationships within families, and strong group identification reflect the paths youth take as they transition to high school. Further, UNESCO (2009), reports attitudinal barriers as factors that increase dropout rates and in turn lower transition rates of learners with disabilities.

The study further sought to find out from the head teachers the effect of teachers' preconceived expectations of learners with disabilities performance in class.

Figure4.10: Teachers preconceived performance expectations



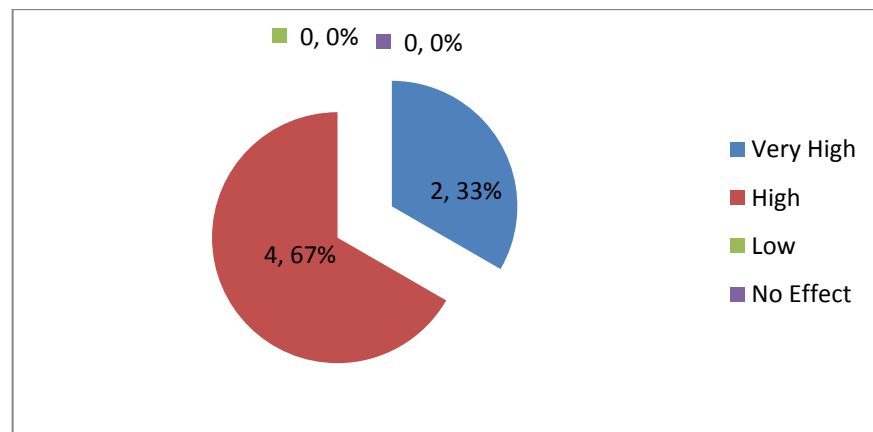
Source: Research Data (2015)

Two thirds (4, 66.7%), of the head teachers felt that teachers had very strong beliefs that learners with disability cannot perform tasks at par with their nondisabled peers while the other 2 (33.3%), felt that teachers held somewhat strong beliefs regarding what these learners can or cannot do. The findings

implied that most teachers held the view that learners with disabilities could not perform at par with their nondisabled peers.

In addition, the study sought to find out from the head teachers whether school set performance trends (culture) influenced transition rates.

Figure 4.11: Established School Performance Culture



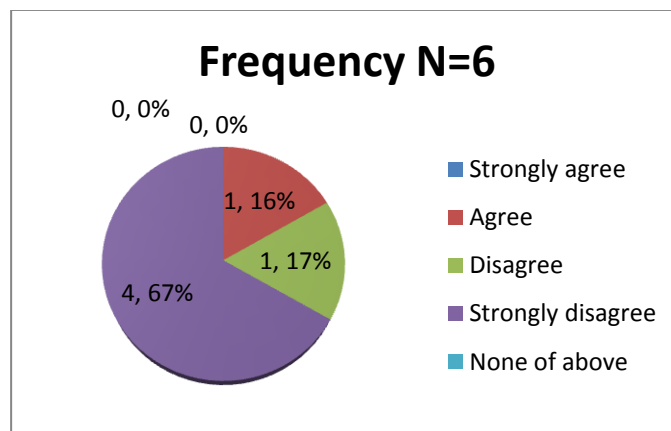
Source: Research Data (2015)

Two thirds (4, 67%), of the respondents indicated that the influence of school performance culture on low transition rates was high whilst 2 (33%) felt that it had very high effects. The findings indicated that teachers devoted more time teaching those learners who showed ability to post better grades with less effort and improve or maintain school mean score especially in understaffed schools. Wright and Sigafos (2009), support this finding saying that teachers may not have the time or resources to support learners with disabilities especially in resource-poor settings and over-crowded classrooms. They further argue that the

situation would be complicated if there is a severe shortage of well trained teachers capable of routinely handling the individual needs of children with disabilities.

Finally, the item required head teachers to indicate the attitudes of nondisabled community within the school catchment areas and their effects on transition. Figure 4.11 shows the responses.

Figure4.12: Head teachers’ Responses on Attitudes of Nondisabled Community

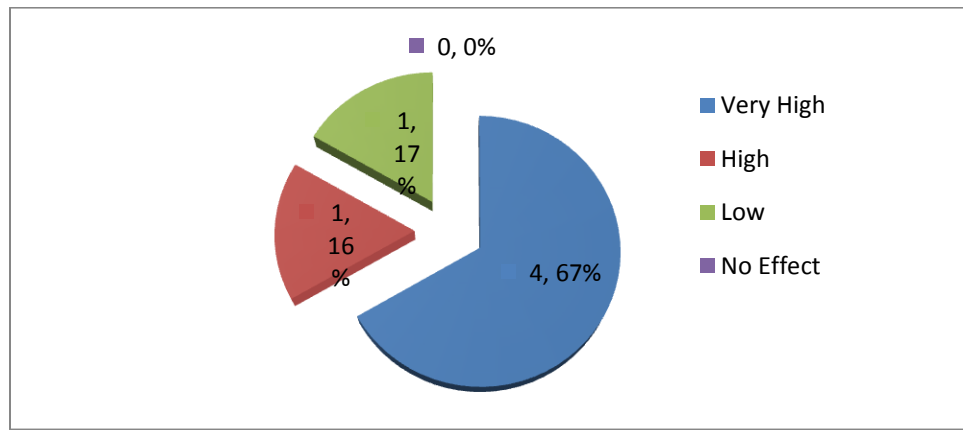


Source: Research data (2015)

Majority 5 (83%) of the respondents indicated that the society attitudes towards those with PD were negative. However, 1(17%), of the head teachers was of the opinion that the society had positive attitudes. The effects of these negative attitudes were indicated by a majority of respondents (4, 67%) as very highly impeding access to education and transition as illustrated in figure 4.13.

Nonetheless, 1(16.7%), was of the opinion that community negative attitudes had somewhat high effects whilst the remaining 1(16.7%), felt that their effects on transition was low.

Figure 4.13: Influence of Community Attitudes on Transition



Source: Research Data (2015)

These findings suggested that the society continues to have attitudes that discriminate against those with disabilities. Physical barriers in form of structures being put up in schools that limit access of the schools to those learners with mobility impairments attest to this.

4.4.2: Teachers Responses on Cultural Barriers to Transition

Hiding of Children with PD

Parents bear the greatest responsibility towards their children whether with or without disability. As already discussed, parents show negative attitudes towards their children with disability. Table 4.14 shows teachers' responses to item 5 in

the teachers' questionnaire which sought to collect data on beliefs and attitudes that impact on low transition rates of learners with PD.

Table 4.14: Effects of Cultural Beliefs and Attitudes on Transition of PDs

	Very High	High	Low	Neutral	Very Low
Parents attitudes towards their children with PD	5	6	3	0	0
Use of negative labels by non-disabled on peers with PD	3	7	4	0	0
Teachers attitudes on academic performance of learners with PD	5	5	2	0	2
Head teachers preference for special placement of learners with PD	2	9	1	0	2
Learners with PD considered as different	4	7	1	0	2
Lack of commitment among teachers to teach learners with PD	6	4	3	0	1
Hiding children with PD	8	6	0	0	0
Associating disability with crses and withcraft	6	4	4	0	0
Parents preference for the education of their non-disabled children to those with PD	7	6	1	0	0
Rampant divorce among couples with children with disability	7	7	0	0	0

Source: Research Data (2015)

8 (57%) of the teachers indicated that parents with children with PD did hide them hence very highly influencing transition. The remaining 6 (43%) were of the opinion that hiding of children with PD had somewhat high effect on low transition rates. These views were echoed by head teachers and officer in-charge of special education who claimed that some parents hide their children with PD

denying them access to education and impeding transition. Other parents abdicate their responsibility to their children to charitable organizations, well-wishers or lay their hope on bursaries from the county government and Constituency Development Fund to educate their children.

During the researcher's interview with the Sub-County SNE coordinator of it was revealed that many parents hid their children with PD and more so those with severe conditions. The presence of eleven integrated programmes for learners with intellectual disabilities as compared to only one special school for learners with cerebral palsy in the Sub-County attest to this. Further, hiding of children with PD was associated to beliefs that curses and witchcraft were causes of these disabilities. In addition, the officer felt that most parents feared exposing their children with PD for fear of being 'ridiculed'. The officer further alluded that some parents who visited EARCs to have their children assessed complained of being 'gazed at' by people.

Associating PD to Beliefs

Majority of the teachers 6 (43%), indicated that most parents with children with PD and society at large associate disability with either curses or witchcraft affecting transition negatively. Of the remaining eight respondents, 4 (29%), felt the belief is common and influences transition while the other half felt though the belief is there it has low influence on transition. Cumulatively, 10 (72%) of the respondents supported the notion that beliefs in curses and witchcraft as causes of

disability is a common phenomenon in society and impacts negatively on access, retention, progression and transition of these learners to secondary schools. The belief that having a child with disability in a family was a bad omen was cited as a cause of divorce. Half 7 (50%) of the respondents indicated that divorce among couples with children with PD was common and contributed very highly to low transition rates. The other half saw its influences as high.

The Sub-County coordinator of special education in support of the teachers views said having a child with disability is greatly attributed to acts of witches and wizards or a violation of societal norms consequently the hiding of these children. This conforms to other research by Gona (2010), Bigby and Clement (2010), Eskay (2009), and Hartley (2009), who purport that the belief causes parental unwillingness to educate their children with physical disability.

Parents Preference for Nondisabled Children

Half (7, 50%), of the teachers and all learners with PD submitted that most parents believe that their nondisabled children stand better chances of being employed and hence have a greater preference for education. Cumulatively 13 (83%), of these respondents indicated that parents preferred nondisabled children to those with disability. This in turn very highly influences the number accessing, progressing and transitioning to secondary schools.

Although majority of respondents cited poverty as a problem that most parents of children with PD face, the findings of this study suggested parents preference for

their able-bodied children. Nevertheless, poverty coupled with the belief that able-bodied learners were more likely to land on a job on completing school are factors that lead to low parental support for their children with disability. Lack of parental support lenders many of those with disability to drop out of school. A study by Torreno (2012), supports this finding identifying parents' lack of knowledge and understanding of what their children with disability can or cannot do and negative attitudes and stereotypes in society as some of the greatest barriers to inclusion and transition.

Use of Negative Labels

Use of negative labels by nondisabled learners toward those with PD was indicated by 7 (50%), of the respondents as common and its impact on transition rates as high. However, 4 (29%), of the respondents indicated that their use had low effect. The findings indicated that slightly over 70% of the respondents viewed negative labels as impacting negatively on transition.

Associating Disability with low Academic Performance

Associating disability with low academic performance was a belief among teachers indicated by 5 (35.7%), of the respondents as influencing very highly low transition rates. An equal number rated its effect as high. Nonetheless, 2 (14%) indicated that this belief had low impact whilst the remaining 2 (14%) felt it had no effect.

Preference for Special School Placement

Most 9 (64%) of the teachers submitted that head teachers prefer special school placement for learners with PD. This preference highly influences transition rates of these learners. Another 2 (14%) indicated this preference as impacting very highly on transition. Cumulatively 11 (78%) respondents felt head teachers preferred special school placement delaying in enrolling those with disability with a view to having them consider this alternative placement. However, 3 (22%), of the respondents felt this attitude had low or no influence on transition rates.

Teacher Commitment to Teach Learners with PD

Majority of the respondents 6 (43%), submitted that teachers lack of commitment to teach learners with PD either because of congested classes or under estimating the learners' academic prowess. This attitude contributes very highly to low transition rates. About 29% of the respondents were of the view that teachers were somewhat committed while the remaining 4 (28.6%) felt teachers were fully committed.

The implication of this finding was that transition was greatly affected by teacher lack of commitment to teach learners with PD. In addition, their perception of learners with disabilities as having lower academic prowess, has two major implications: first, that most teachers will often be reluctant to invest time and effort to teach a student they deem will not improve the school's set performance standards and secondly, they will fail to provide necessary support to the learner

that will enable him/her move through the current situation for failure to identify their needs. Teachers in this regard may end up creating barriers for the learners that impede their transition. Harper and Quaye (2009), using Schlossberg transition theory support this finding arguing that for transition to be effective there is need for the teacher to affect how an individual views life (**self**) and provides honest feedback to responses (**support**). In addition, teachers affect how individuals view personal ability in the learning environment (**situation**) and develop responses that control the meaning of the disabling condition, and those that aid in managing the stress arising from the same (**strategies**).

4.4. 3: Effects of Teacher Attitudes on Transition Rates

The study found out that most teachers, faced with established school performance culture, concentrate more on those students who appear to be more promising to post better exam grades. It therefore emerged that teachers relegate to the oblivion students who may not necessarily contribute to a profile of academic excellence despite the uniqueness of these learners and their conditions. The aftermath of this scenario is a high dropout rate leading to low transition rate of those students. Booth and Ainscow (2011), support this finding by saying that school learning environment and the culture of a school influences the way teachers interact with children who experience disability, as well as teachers' attitudes towards learners with disability inclusion in the regular school. However, some teacher respondents alluded to the notion that teachers' and nondisabled

learners' attitudes and beliefs do not affect transition of learners with PD hence implying that there exist very positive beliefs and attitudes towards those with disability. This finding was not supported by any records in transition success and contrasts those of O'Sullivan and MacLachlan (2009), and Mpika and Manchester (2007), who say that negative attitudes and beliefs in form of stereotypes held by teachers, school administrators, other children, and even family members affect the inclusion of children with disabilities in mainstream schools resulting in low transition rates. Some teachers including head teachers believe they are not obliged to teach children with disabilities arguing that this should be done by special education teachers.

4.4.4: Learners with PD Views on Cultural Barriers

The last item in the learners with PD questionnaire sought to find out from them what cultural barriers they faced that would adversely influence their transition to secondary schools. Table 4.15 shows the responses.

Table 4.15: Attitude barriers toward those with PD (n=18)

Responses	Frequency	Percent
Some teachers are kind and understanding	6	33.3%
Some teachers give remedial work	2	11.1%
Most teachers treat all learners alike	7	38.9%
Some show concern over poor performance	1	5.6%
Some are unkind and do not allow extra time for assignments	2	11.1%
TOTAL	18	100.0%

Source: Research Data (2015)

Majority of them indicated that most of the teachers treated all students alike. A third 6 (33.3%) viewed their teachers as kind and understanding. The other 3 (17%) indicated that some teachers were concerned about their performance and even gave remedial lessons. However, 2 (11%) of the respondents said that their teachers were unkind and did not allow them extra time to do their assignments. As concerns findings espoused by learners with PD with regard to attitudes of their teachers, it emerged that few teachers cared or even took notice of derogatory comments and labels directed at them by their nondisabled peers. Most learners also indicated that very few teachers ever gave remedial lessons or individualized instruction. Amsel and Fichten (1988) in support of this finding say that negative labels based on attitudes and preconceived stereotypes vastly affect the social adjustment of the students with disabilities. In the event that learners

with disabilities are unable to develop a behaviour that would help them fit in well with the majority (able-bodied students), dropping out of school becomes inevitable.

As regards parental attitudes towards those with disabilities, learners with PD were asked to state how prompt their parents were with regard to fees payments. The table 4.16 shows learners responses.

Table 4.16: Attitudes of parents toward their children with PD

Responses	Frequency	Percent
Parents delay fees payment for flimsy reasons	11	61.0%
Parents favour non-disabled siblings	5	28.0%
Depending on charity	2	11.0%
TOTAL	18	100.0%

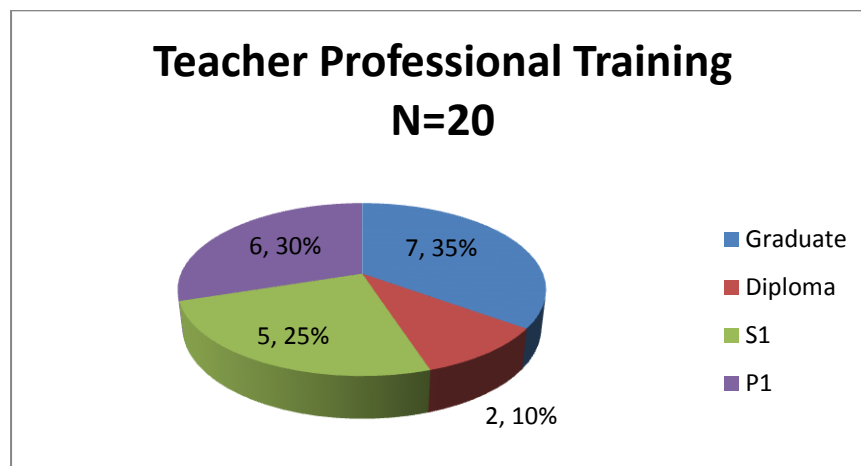
Source: Research Data (2015)

Majority 11(61%) of the learners claimed that their parents delayed in paying their fees claiming that their other siblings studied far from home, money was scarce and they were close home. Five (28%) of the learners felt that their nondisabled siblings were favored. Two thirds (2, 67%), of those in secondary schools had to wait for bursaries. The Sub-County SNE coordinator affirmed this by telling the researcher that she is often invited by head teachers to address parents of children with disabilities enrolled in regular schools on the need to meet their fees payment obligations.

4.5: Impact of Teacher Professional Qualification on Transition Rates of Learners with PD

The third objective of this study sought to determine the impact of teacher professional qualification on transition of learners with PD from primary to secondary schools. Figure 4.14 shows the distribution of teacher professional training.

Figure 4.14: Teacher Professional Training



Source: Research Data (2015)

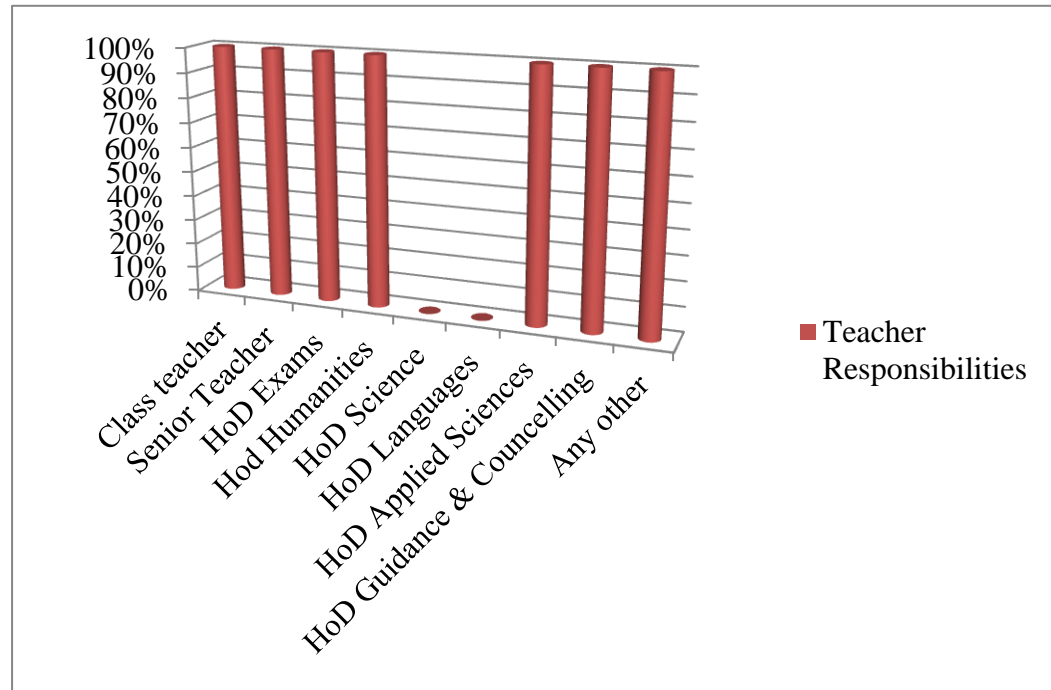
As already discussed, all the teachers involved in the study were professionally qualified to teach. However, only 3 (15%) had trained in special needs education- two at diploma and one at graduate level. The three had had basic primary teacher training.

The implication of this finding was that schools lacked in trained staff to teach learners with special educational needs. This adversely affects the support given to these learners implying that only those learners who are able to work their way get to succeed and transition. Takala, Pirttimaa and Törmänen (2009), in support of this finding recommend that schools should have access to teachers trained in SNE when required to provide assessments, develop individualized education plans, and coordinate services to ensure there are higher transition rates.

4.5.1: Teacher workload and its influence on transition

Item 2 in the teachers' questionnaire required them to state other responsibilities held in school and their influence on transition. The responses are as shown in fig. 4.15.

Figure 4.15: Teacher Responsibilities as assigned by the school.



Source: Research Data (2015)

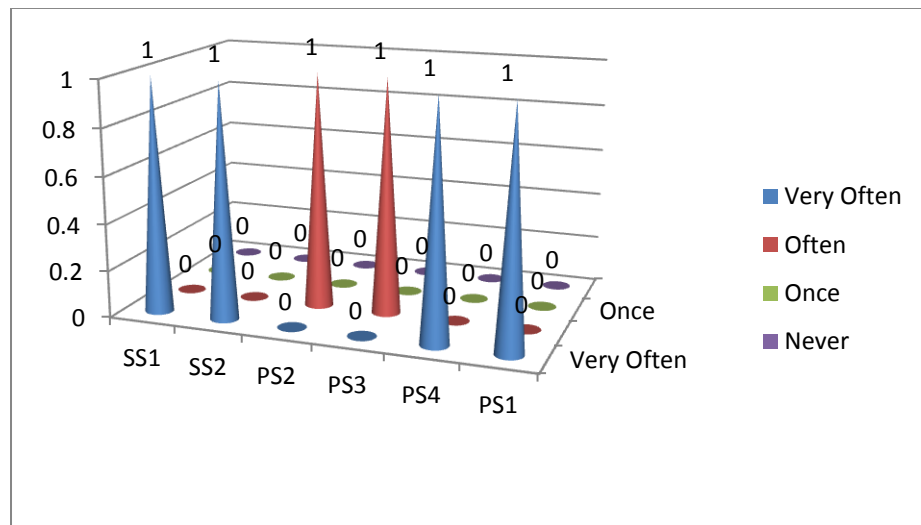
Apart from the regular teaching duties, teachers had more than one other responsibility. Majority 11 (79%), of teachers were class teachers and/or heads of departments. Eight (57%) of the class teachers headed the guidance and counselling department in their schools. All the teachers trained in SNE headed the guidance and counselling department in their schools. There was no noticeable difference in the number of lessons allocated to all the teachers. Despite having a long teaching experience of over ten years, those teachers trained in SNE said that they provided little attention (support) to learners with PD due to the workload assigned to them and instead paid more attention to the typical learners especially the more promising ones.

The findings of the study revealed that those trained in SNE did not help improve transition of those with PD in their respective schools because like their regular teacher colleagues, they devoted more time in maintaining school mean scores. ANPPCAN (2005), supports this finding through its research finding stating that teachers lay too much emphasis on academic performance in order to pass examinations to a point of pushing certain categories of children out of school. Teachers also fail to develop a pedagogy that appeals to the learners with disabilities and hence limit their progression/transition from one class to the next. Moll and Whitmore (2006), define the learning environments in which children learn as mutually constructed by pupil and teacher. Therefore, for learning to take place, the teacher has to make the classroom learning environments highly literate and understand each learner's needs to ensure successful learning for all and eventual transition.

Item 3 in the teachers' questionnaire sought to determine teacher professional qualification limitations that act as impediment to transition of learners with PD. As already stated, only three had SNE training or about 2% of the teaching force in the six schools involved in the study. All the regular teachers indicated lack of training in SNE as a hindrance to effective teaching of learners with disabilities. Head teachers, in response to item 12 on teacher competencies were in agreement with the teachers views. Two thirds of the head teachers indicated that they received very frequent complaints from their teachers on their inability to meet

the educational needs of these learners. The other third indicated receiving occasional complaints. These findings are illustrated in figure 4.16 below.

Figure 4.16: Complaints from Regular Teachers over PD N=6



Source: Research Data (2015)

4.5.2: Influence of Teacher Professional Qualification on Transition Rates

As already discussed earlier, all teachers were professionally qualified to teach at the levels of their deployment but only three of the teachers had trained in SNE. However, their effectiveness in meeting the educational needs of learners with special needs in their schools was found to be minimal due to large class sizes, teacher shortage and assigning more than one responsibility to teachers. It emerged that these teachers though willing to offer differentiated instruction to learners with disability had hardly any time to do so due to a demanding teaching workload. One teacher complained that *'the class sizes are too large for teachers to give any individual attention to weak pupils let alone to one student who should*

be in a special school.' This response seems to imply that teachers expect learners with PD to be in special schools under specially trained teachers. This notion has an effect on the learner because teachers may not ensure that all learners fully access the required curriculum. As a consequence, the learner with PD may develop a feeling of isolation and uncertainty of ever successfully graduating at different levels in primary or transitioning to secondary. Robotham and Julian (2006) using Schlossberg theory of transition list fear of failure, academic workload and time demands as some of the stressors a learner may experience in a learning situation which if not overcome may result in learner drop out.

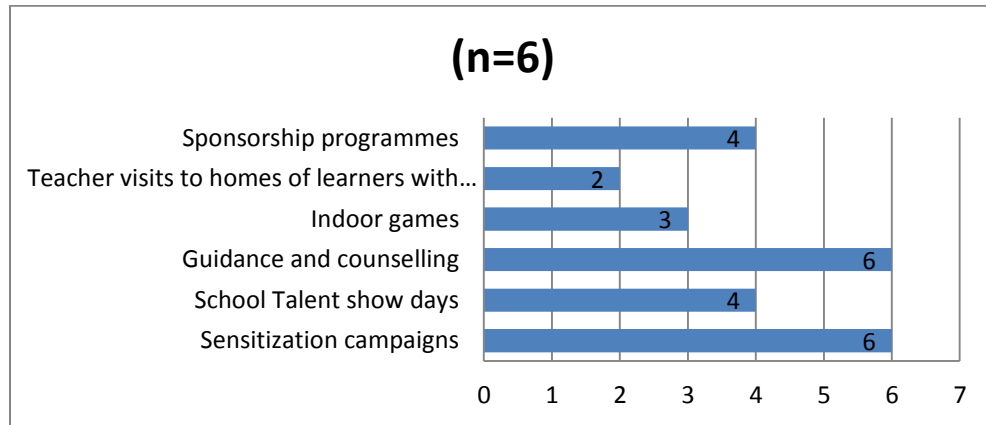
Despite the length of teaching experience, there was little evidence of teachers either trained in SNE or not providing individualized instruction to learners with PD in their respective schools. Lack of support from teachers for these learners diminishes their power to develop coping strategies as they attempt to find themselves within the learning environment. Claborn and Kane (2012), argue that learners find it difficult to develop effective coping strategies even with the normal transition from one class to another if they do not get support. This in effect may result in many of these learners dropping out unless out of their own effort they work their way through. Winnick (2011), notes that use of individualized education programme (IEP) is the single most appropriate strategy of mitigating the educational needs of learners with disabilities and if it is lacking learners are disillusioned.

On the issue of teacher competency, most head teachers indicated that they frequently received complaints from their teachers on their inability to teach effectively learners with PD. This finding holds true since those with SNE training represent about 2% of the teacher establishment in the schools involved in this study. This may imply that teachers without SNE training felt as lacking in knowledge and skills to teach learners said to have special educational needs on one hand. On the other hand, it emerges that many regular education teachers hold on to the opinion that learners with disabilities should be educated in special schools by special education teachers. It further implies that most regular teachers provided the basic minimum assistance to the learners with disabilities in their charge. This is contrary to World Report on Disability (2011) that recommends schools with learners with disabilities included to take it upon themselves to develop ways of teaching that respond to individual differences, to the benefit of all children.

4.6: School Interventions for Countering Cultural and Environmental Impediments to Transition

The fourth task of this study was to determine what intervention measures the schools were using to counter the effects of culture and environment. Head teachers were asked to list measures their schools had taken to counter the effects of cultural and environmental impediments to transition. Figure 4.17 shows the responses given.

Figure 4.17: Strategies for Countering Cultural Impediments to Transition



Source: Research Data (2015)

The responses denote how head teachers work towards improving transition. All head teachers indicated using sensitization campaigns as forums for enlightening the community about disability. Five (83%), of the head teachers use guest speakers to address parents and students on issues of disability. These forums help to demystify disability and enlighten participants on the causes of different disabilities. One head teacher submitted that she organizes school open days and invites the Sub-County coordinator of SNE and other personnel from an organization she referred to as St. Martin to sensitize the community on disability.

All head teachers indicated using guidance and counseling department to help learners who showed signs of falling out with the school and parents that failed persistently to honour their obligations in meeting the needs of their children. Two thirds of schools use school talent show days and sponsorship programmes. Schools use talent show days to encourage all students to prepare themselves in

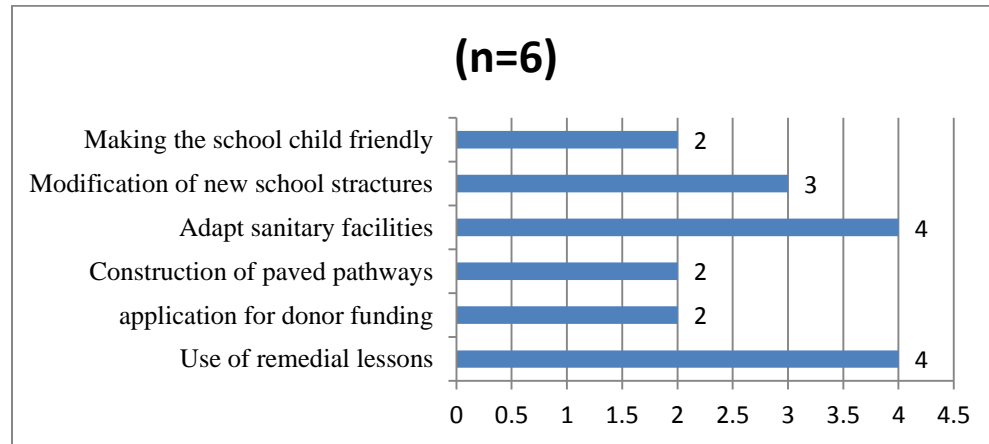
different fields such as dancing, coral verse recitations, artwork, etc. to present to guests and parents. The results of the shows indicated great change in attitudes and beliefs held by the community toward persons with disability.

Of the six respondents 4 (67%), indicated liaising with well-wishers to sponsor needy students with disability in order to make them remain in school. Another 3(50%) of the head teachers indicated having introduced indoor games in school to ensure learners with disabilities who could not go to the field were catered for. Those who participate have ever ceased being passive observers and become very active participants with some of them featuring in zonal competitions in chess and scramble in their respective schools. A third of the head teachers use teacher visits to homes of those with physical disabilities. These visits are a means of understanding family home environments and as vital forums for changing parental attitudes towards their children with disabilities.

4.6.1: Environmental Strategies used to Improve Transition

Concerning environmental intervention strategies employed to make the schools more accessible to ensure improved access, retention and transition, head teachers listed the strategies illustrated in figure 4.18 below.

Figure 4.18: Environmental Interventions to Improve Transition



Source: Research Data (2015)

The head teachers indicated different strategies with the most commonly used being remedial lessons and adapting sanitary facilities (both 67%). Half of the head teachers modify new classrooms to ensure they are disability friendly. Other strategies indicated by a third of the respondents each include construction of paved pathways, writing to different donor organizations for funds and making their schools child friendly by introducing suggestion boxes to collect learners' views on environmental limitations.

Other strategies include introduction of lunch feeding programme and modification of existing physical structures to make them disability friendly. A majority of head teachers rated the effectiveness of these intervention strategies as good while a third said they were satisfactory. This is because the intervention measures are not without challenges.

4.6.2: Intervention Strategies for Cultural Impediments

Concerning cultural intervention strategies used by schools to improve transition, the study found that different schools used different strategies. Head teachers in collaboration with the Sub-County office in charge of special education and the guidance and counseling departments in their schools use different strategies to ensure more learners with physical disabilities enroll with a view to increasing transition rates. Most used strategies are sensitization campaigns during school parents' days, guidance and counseling department, liaising with well-wishers to sponsor students with disability, and organizing school talent show days. Other strategies include introduction of indoor games and home visits by teachers.

The researcher found out that sensitization campaigns bringing together different stakeholders are gradually helping demystify disability as well as enlighten participants on the causes of different disabilities. Learners with disability are availed a forum where they acquire self-identity, social acceptance and support which ultimately help them to develop strategies of coping with transition. These findings conform to research by Anderson, Goodman, and Schlossberg (2012) who aver that transition as a process of moving in, moving through, or moving out of a situation requires the assistance of significant others to help those in transition to navigate successfully through a transition. Further, Samantha (2014), using Schlossberg theory of transition supports these findings when she observes that it is important that institutions of education with this population of students

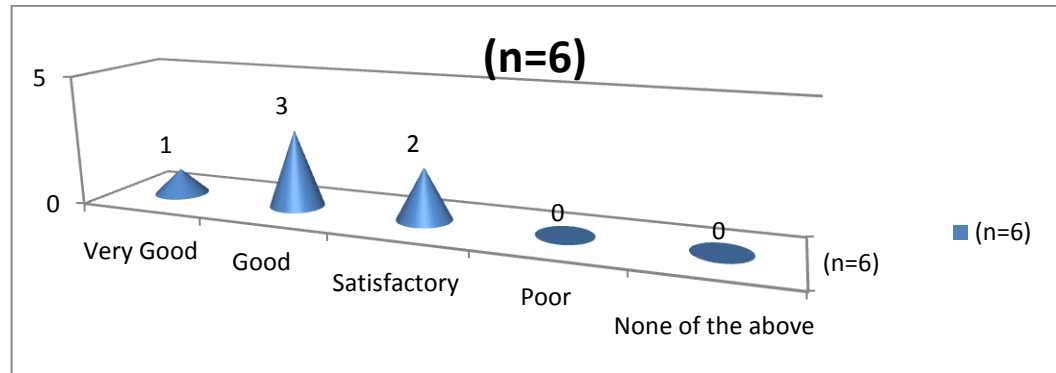
make an effort to find ways to get the students connected to the institution and see the institutions as a home.

Most head teachers affirmed the effectiveness of their guidance and counseling departments in helping the learners who showed signs of falling out with the school and parents that failed persistently to honor their obligations in meeting the needs of their children. Samantha (2014), supports these findings in her study by noting that students involved in her research observed that offering welcoming and helpful services (guidance and counseling) helped them to strengthen their coping resources related to self-control and commitment to school. Also effective are school talent show days. Head teachers who organize these shows explained that they have gone a long way in changing attitudes and beliefs held by the community toward persons with disability. In addition, nondisabled learners appreciate and marvel at the ability and talent behind the shadow of physical disability. Nevertheless, one of the head teachers reported dismay over wrongful use of funds from well-wishers by parents of children with physical disabilities.

4.7: Effectiveness of the Intervention Measures Taken by Schools

Finally the respondents were asked to rate the effectiveness of the intervention strategies the schools had used. Figure 4.19 shows the responses given by the respondents.

Figure 4.19: Effectiveness of the Intervention Measures Taken by Schools



Source: Research data (2015)

Majority 3(50%), of the respondents viewed the interventions as having had successful outcomes resulting in increased retention and progression and reduced dropout rates. However, 2 (33%), said the intervention measures had satisfactory success. Only 1(17%) of the respondents felt the interventions had very successful implications. These findings implied that school interventions are gradually helping change institutions with learners with disabilities. However, the society still needs to embrace the idea of universal design to make school environments completely disability friendly.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the study in relation to the main objectives, implications of the findings of the study and the general conclusions drawn. Also presented are recommendations for different stakeholders and suggestions for further research. The summary is based on findings from 6 head teachers, 14 teachers, 1MoE official, 18 learners with PD and 38 learners without disability.

5.2 Summary of Research Findings

The purpose of this study was to determine cultural and environmental factors that influence low transition rates of learners with physical disabilities from primary to secondary schools in Nyahururu Sub-County of Laikipia County of Kenya. Four key research questions guided the study. The first research question sought to determine environmental factor affecting access of primary education and transition of learners with physical disabilities from primary to secondary schools. The second sought to identify cultural barriers faced by learners with physical disabilities that influence their transition. The third sought to determine teachers' professional qualification toward meeting the educational needs of learners with physical disabilities while the fourth sought to identify the intervention strategies schools are using to overcome cultural and environmental barriers in order to improve transition rates of learners with PD.

The study identified distance, poor terrain, lack of individualized instruction and adapted sanitary facilities, un-adapted doorways, steps on paths leading to classrooms, congested classrooms and teacher workload as major causes for many learners with PD dropping out of school leading to low transition rates. Lateness, fatigue and frequent absenteeism arising from harsh weather conditions or being left by the roadside by uncaring ‘Matatu’ drivers often leads to low self-esteem and eventual dropout. The study further found out that teachers felt less obliged to teach learners with PD for lack of training in SNE showing more preference for these learners’ placement in special institutions. Lack of individualized instruction to counter the effect of time lost and disability eventually leads to dropping out.

As concerns cultural effects, the study found out that parent negative attitudes and beliefs towards disability coupled with poverty lowers the support parents give to their children with PD. Other cultural impediments identified by the study include established school performance culture unresponsive to individual and intra-individual differences, use of negative labels, divorce among couples with children with PD, and many head teachers preferring special school placement. In addition, the study noted there are many cases of parents hiding their children with disability especially the severe ones. Furthermore, teachers were found to have very strong preconceived opinions that learners with disability cannot perform tasks at par with their peers without disabilities. However, the relationship between learners with PD and those without is cordial.

The findings on teacher qualifications indicated that all teachers were professionally qualified to teach learners without disabilities. Only about 0.89% had SNE training within the teacher establishment in the six schools. Most regular education teachers have a feeling of inadequacy when teaching learners with PD and hold on to the opinion that these learners should be educated in special schools by special education teachers. This may contribute to the low transition rates.

As regards enrollment, dropout and transition, the study found out 55 learners with PD had enrolled in the six schools over the last eight years. Twenty-three dropped out of school between 2009 and 2014 with 52% of these being girls. Five (0.714 learners per year) had transitioned to secondary school in seven years.

Finally, the findings further revealed that schools commonly use sensitization campaigns during school parents' days, guidance and counseling department, indoor games, liaising with well-wishers to sponsor students with disability, and talent show days as well as home visits by teachers to counter the effects cultural barriers. These strategies are gradually influencing positively both the learner and other stakeholders by demystifying disability and bringing to the fore abilities and talents in learners with disabilities.

5.3 Conclusion

The purpose of this study was to determine the effects of cultural and environmental factors on transition rates of learners with physical disabilities

from primary to secondary schools in Nyahururu Sub-County. Following the findings of this study, the researcher made the following conclusions. Despite the distances covered by learners with PD being ‘short’, they act as major barriers to their transition. The schools’ built and un-built environment are disability unfriendly although schools are taking initiatives to modify new structures while at the same time improving the natural school terrain. However, the congestion in classes, teacher workload, and inadequate trained personnel in SNE reduces chances for learners with PD receiving individualized instruction. Those learners who are unable to adjust to school norms often drop out leading to low transition rates.

The study has also shown that transition disparity between those with disability and those without may be occasioned by negative cultural beliefs and attitudes held by different stakeholders in the education of learners with PD. It is crucial that the focus on children with PD be built on each individual child’s existing personal strengths and resources in order to introduce to them a learning educational model that ensures their transition. This will counter the negative effects of cultural beliefs and attitudes.

What has been accomplished with the learners without disabilities is possible with those with PD if efforts are made towards ensuring learning conditions are suitable for all and curriculum adapted to the children with disability capabilities.

5.4 Recommendations

The researcher makes the following recommendations based on the study's findings;

1. The Ministry of Education undertakes to introduce in all teacher training institutions curriculum content on SNE to ensure more teachers are able to teach learners with special educational needs.
2. The Ministry of Education should encourage more regular education teachers to advance their knowledge in SNE with a view to increasing inclusiveness in education.
3. The Ministry of Education should collaborate with the ministries of Health and Internal Security to ensure follow-up is done on identified cases of children with disabilities. Local administration officers if provided with data are able to make follow-ups on identified cases to ensure educational placement for these children on time. This will minimize hiding of children with severe disabilities and also ensure achievement of the EFA goal.
4. The Ministry of Education in collaboration with other stakeholders should work towards educating communities on the causes of disabilities to demystify them. and to remove environmental barriers in schools to ensure learners with PD are included fully.

5. Finally, the Ministry of Education should provide capitation for removing environmental barriers and modification of the existing structural infrastructure in schools to make them disability friendly.

5.4.1 Suggested Recommendation for Teachers

Physical disability is not a replica of mental inability and all these learners may need is differentiated instruction. The following strategies would help teachers to be effective when teaching learners with PD.

- 1) Teachers should assess individual learners with PD in their classes to determine their abilities and work on the strengths to help them learn.
- 2) Teachers should improvise ways of ensuring that the learning environment is conducive for the learner with PD while at the same time providing all support necessary to the learner.
- 3) Teachers should provide more accommodations to learners with PD to cater for problems in writing, reading, posture, speech, mobility et cetera.

5.4.2 Recommendations for Further Research

This study did not cover areas outside Nyahururu Sub-County because of time and financial limitations. A future research can conduct a similar study in the Sub-Counties not included in this study.

This study did not gather views of parents with children with PD due to time and financial constraints and therefore further research is vital to illuminate ways of improving transition rates of these learners.

This study considered learners with physical disabilities only and further research to include those with multiple disabilities to illuminate more ways of improving transition of these groups of learners is vital.

There is need to study the effect of government capitation for learners with PD in both special and regular schools on their transition rate.

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APPENDIX I: QUESTIONNAIRE FOR HEAD TEACHERS

I am conducting a research on influence of culture and environment on transition of learners with physical disabilities from primary to secondary school in Nyahururu Sub-County. You are requested to fill this questionnaire truthfully. Please note that any information you give will not be used for any other purposes other than the research and strict confidentiality is assured. Note also that there are no wrong answers because what the study seeks is your considered opinion on the topic.

1. Please fill in an updated data on your school on the following:

(a) Name of school: _____

(b) Students' enrollment:

Year	Gender	With PD	Without PD
2008	Boys		
	Girls		
2009	Boys		
	Girls		
2010	Boys		
	Girls		
2011	Boys		
	Girls		
2012	Boys		
	Girls		
2013	Boys		
	Girls		
2014	Boys		
	Girls		

2. Indicate the number of learners with physical disabilities who dropped out of school in the years shown in the table below

Year	Boys	Girls	Total
2009			
2010			
2011			
2012			
2013			
2014			

3. During the period you have been in this school as the Head teacher, what level have you noted more dropout of learners with physical disabilities?

Lower primary

Upper primary

Same for both levels

4. Indicate the number of learners with PD from this school who have graduated and have been admitted to secondary schools in the years shown below.

Number Year	Transitioned to Boys	Secondary Girls	School Total
2009			
2010			
2011			
2012			
2013			

SECTION I: ENVIRONMENTAL FACTORS

1. The table below presents statements on environmental challenges that can influence access, retention, progression and transition. Based on your experience as a Head teacher, indicate to what extent they lead to low

access and transition from primary to secondary of learners with physical disabilities in Nyahururu Sub-County.

Environmental challenges	Level of			Influence
	Very high	High	Low	No influence
i.Long home to school distance.				
ii.Poorly maintained roads and terrain for wheelchair users.				
iii.Congested classrooms.				
iv.Narrow pathways for wheelchair users in the school.				
v.Lack of individualized attention of learners with PD.				
vi.Lack of adapted curriculum to cater for the needs of all learners.				
vii.Lack of adapted toilet facilities.				
viii.Inaccessible classrooms due to narrow doorways.				
ix.Unpaved pathways around the school compound.				
x.Inappropriate seating equipment.				
xi.Lack of a school nurse to attend to learners with chronic illness.				

2. Which other school-based environmental factors do you consider as inhibitors of access, retention and transition of learners with physical disabilities in Nyahururu District?

SECTION II: CULTURAL FACTORS

1. How do you rate the attitude of parents of learners with PD, teachers and nondisabled learners towards those with disabilities?

	Very positive	Positive	Neutral	Negative	Very negative
Parents					
Teachers					
Non-disabled					

2. The table below presents cultural factors that can influence access and transition of learners with physical disabilities. Indicate to what extent they lead to low transition rates in Nyahururu Sub-County.

Environmental challenges	Level of influences			
	Very high	High	Low	No influence
i.Long home to school distance				
ii.Poorly maintained roads and terrain for wheelchair users				
iii.Congested classrooms				
iv.Narrow path ways for wheelchairs users in the school				
v.Lack of individualized attention of learners with PD				
vi.Lack of adopted curriculum to cater for the needs of all learners				
vii.Lack of adapted toilet facilities				
viii.Inaccessible classrooms due to narrow door ways				
ix.Unpaved path ways around the school compound				
x.Inappropriate sitting equipments				
xi.Lack of a school nurse to attend to learners with chronic illness				

SECTION III: Influence of teacher qualifications

1. What is the teachers' establishment in your school?

10 15 20 +25

2. Of these how many have been trained to teach children with special education needs?

1-3 4-7 8-10 over 10 none

3. In your own view are the educational needs of learners with PD being met in this school? Please explain

Section IV:Strategies of improving access, retention and transition

4. What in your opinion do you think the school has/is doing to improve access, retention and transition of learners with physical disabilities from primary to secondary school?

5. How do you rate the intervention strategies the school has used?
- a) Very effective
 - b) Fairly effective
 - c) Satisfactory
 - d) Uneffective
 - e) None of the above

Thank you

APPENDIX II: QUESTIONNAIRE FOR TEACHERS

The questionnaire is aimed at collecting data on the influence of culture and environment on the transition of learners with physical disabilities from primary to secondary schools in Nyahururu Sub-County. All the information you give will be used in this study only and will be treated with utmost confidentiality. Do not write your name. Your honesty in responding to the questionnaires will aid in the success of this study.

SECTION I: DEMOGRAPHIC INFORMATION

1. State your gender: Male Female

2. Indicate your academic and Professional qualification

Professional

P1

S1

Diploma

Specify

Other

Academic

Degree

EAACE

KCE/EACE

KCSE

Indicate which of the following responsibilities you hold in school.

Class teacher

Senior teacher

Head of department

Games and sports master/mistress

Guidance and counseling

Any other..... Specify

SECTION II: EFFECTS OF CULTURE ENVIRONMENT AND TEACHER QUALIFICATION ON RETENTION TRANSITION

1. How long have you been in the teaching profession?
2. How long have you been teaching in your present school? State the period.
3. What classes do you teach? Please specify the subjects taught.

Class _____

Subjects _____

4. In the classes you teach are there learners with physical disabilities?

Specify the number.

Yes

No

Number

5. The table below presents cultural, environmental and teacher qualification factors that can help in determining rates of retention and transition of learners with physical disabilities from primary to secondary. Based on your experience as a teacher, indicate to what extent they influence retention and transition in Nyahururu Sub-County.

Cultural determinants	Very high	High	Neutral	Low	Very low
Parents attitudes toward education of their children with PD.					
Non-disabled students using labels on peers with PD.					
Teacher attitudes towards academic achievement of learners with PD.					
Head teachers preference for special school placement.					
Learners with PD considered as different Environment determinants.					
Large and congested classes.					
Inaccessible classrooms due to narrow doorways stair cases.					
Lack of space for wheelchairs, walker etc.					
Teacher workload.					
Lack of related services providers e.g nurse.					
Lack of adapted curriculum.					
Lack of adapted sanitary facilities for students with PD.					
Inappropriate seating equipment.					
Teacher qualification.					
Lack of training on recognizing disabilities.					
Lack of training of identifying unique educational needs of students.					
Lack of additional training in the area of special education.					
Inability of teachers to adapt teaching methods o the unique of learners.					

6. What other cultural and environmental factors in your opinion have influenced access, retention and transition of learners with physical disabilities_____.

SECTION III: STRATEGIES TO IMPROVE TRANSITION

Based on your experience as a teacher and a member of the community; kindly list four things that in your opinion can be done to improve transition of learners with physical disabilities from primary to secondary in Nyahururu Sub-County.

**APPENDIX III: INTERVIEW SCHEDULE FOR MINISTRY OF
EDUCATION OFFICIAL**

The questionnaire is aimed at collecting data on the influence of culture and environment on the transition of learners with physical disabilities from primary to secondary schools in Nyahururu Sub-County. All the information you give will be used in this study only and will be treated with utmost confidentiality. Your honesty in responding to the questionnaires will aid in the success of this study.

1. How many children have been assessed in Education Assessment and Resource Centre over the last 10 years?

2. Of these how many had physical disabilities.

3. What is the most frequent condition of physical disability of the children who come for assessments? Specify

4. What is the most frequent age bracket of the children who come for assessment specify

1 – 2 Years 3-5 Years 6-10 Years Other

5. Are those of school going age already placed?

Yes No

6. In your opinion what cultural factors influence enrollment, retention and progression transition of learners with physical disabilities in Nyahururu Sub-County?

7. What environmental factors do you consider when recommending placement of children with physical disabilities?

8. How would you rate collaboration between parents and school in the provision of education to learners with PD

Very High High Low None

9. What strategies in your opinion would be used to counter cultural and environmental effects in order to improve transition of learners with PD in Nyahururu Sub-County

APPENDIX IV: QUESTIONNAIRE FOR PUPILS

The questionnaire is aimed at collecting data on the influence of culture and environment on the transition of learners with physical disabilities from primary to secondary schools in Nyahururu Sub-County. All the information you give will be used in this study only and will be treated with utmost confidentiality. Do not write your name. Your honesty in responding to the questionnaires will aid in the success of this study.

1. Specify your gender by ticking in the correct box

Male Female

2. Age: 8-12 years
13 – 15years
+16 years

Name of school: _____

3. Class/form”

Class

Form

4. What physical disability do you have?

5. Does the disability affect how you get to school or from school to your home? Explain _____

6. Are you comfortable in your class when attending lessons?

Yes

No

7. If No in 6 above what are the reasons for discomfort?

8. Do you face any environmental challenges within the school?

9. _____

10. How do other students without disability treat you in school

Very well

Well

Sometime unfairly

11. In your opinion do teachers understand your educational needs and abilities?

Yes No Not very well

Are you allowed more time to do assignment? Yes No

12. What do you think your school can do for you to help you perform to your best? _____

APPENDIX V: AUTHORISATION LETTER



OFFICE OF THE PRESIDENT

MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT

Telegram: "DISTRICTER"
Telephone: 065 - 2022100
When replying please quote

The Deputy County Commissioner
Nyahururu Sub-County - LAIKIPIA
P.O. BOX 2003 - 20300
NYAHURURU.

Ref. No. NHR/ED/12/8/VOL.I/ (198)
and date
Email - denyahururu@yahoo.com
Fax Line - 0652022100

.....20.....

30th July, 2015

TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION JOHN MUIGAI MACHARIA

This is vide your letter from National Commission for Science, Technology and Innovation Ref: NACOSTI/15/8690/7050 dated 28th July 2015 refers;

Authority is hereby granted to the above named to carry out the research activities ON "*Cultural and environmental factors impeding transition of learners with physical disabilities from primary to secondary schools in Nyahururu Sub-county of Laikipia County, Kenya*"

Accord him the necessary assistance.

KIPLAGAT T. TARUS
AG. DEPUTY COUNTY COMMISSIONER
NYAHURURU

Cc: The County Commissioner
LAIKIPIA

The County Director of Education
NYAHURURU SUB-COUNTY

MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY

STATE DEPARTMENT FOR EDUCATION

TEL: No.065-20-22272

FAX: No.065-20-22272

Email: deonyahururu@yahoo.com

When replying please quote



SUB-COUNTY EDUCATION OFFICE,
NYAHURURU SUB-COUNTY,
P. O. BOX 2280 - 20300
NYAHURURU.

REF: NYAH/GEN/82/56

DATE: 30th July, 2015

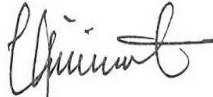
TO
ALL HEADTEACHERS
ALL PRINCIPALS
NYAHURURU SUB-COUNTY

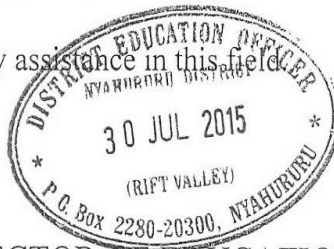
RE: RESEARCH AUTHORIZATION
JOHN MUGAI MACHARIA KENYATTA UNIVERSITY

This is vide your letter from National Commission for Science, Technology and Innovation Ref: NACOSTI/15/8690/7050 Date: 28th July, 2015, which refers;

Authority is hereby granted to the above named to carry out the research activities on "*Cultural and environmental factors impeding transition of learners with physical disabilities from primary to secondary schools in Nyahururu Sub-county of Laikipia County, Kenya*".

Accord him the necessary assistance in this field


G. M. LESIAMITO
SUB-COUNTY DIRECTOR OF EDUCATION
NYAHURURU SUB-COUNTY



C.C.

COUNTY DIRECTOR OF EDUCATION
LAIKIPIA COUNTY

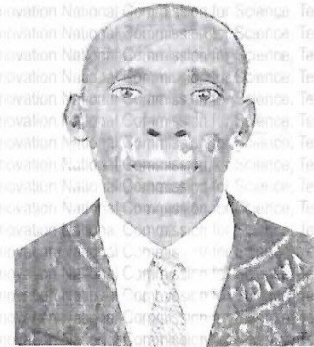
DEPUTY COUNTY COMMISSIONER
NYAHURURU SUB COUNTY

APPENDIX VI: RESEARCH PERMIT

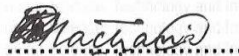
THIS IS TO CERTIFY THAT:
MR. JOHN MUGAI MACHARIA
of KENYATTA UNIVERSITY, 0-20322
MARMANET, has been permitted to
conduct research in *Laikipia County*

Permit No : NACOSTI/P/15/8690/7050
Date Of Issue : 28th July, 2015
Fee Received :Ksh 1,000

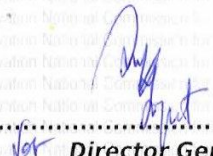
on the topic: **CULTURAL AND ENVIRONMENTAL FACTORS IMPEDING TRANSITION OF LEARNERS WITH PHYSICAL DISABILITIES FROM PRIMARY TO SECONDARY SCHOOLS IN NYAHURURU SUB-COUNTY OF LAIKIPIA COUNTY, KENYA**



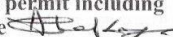
for the period ending:
4th December, 2015



Applicant's
Signature


.....
for **Director General**
**National Commission for Science,
Technology & Innovation**

CONDITIONS

1. You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit
2. Government Officers will not be interviewed without prior appointment.
3. No questionnaire will be used unless it has been approved.
4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
5. You are required to submit at least two(2) hard copies and one(1) soft copy of your final report.
6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice 



REPUBLIC OF KENYA



National Commission for Science,
Technology and Innovation

RESEARCH CLEARANCE
PERMIT

Serial No. A

5977

CONDITIONS: see back page