

**INSTITUTIONAL FACTORS INFLUENCING UNIVERSITY MANAGEMENT'S
INTEGRATION OF LEARNERS WITH SPECIAL NEEDS IN THE UNIVERSITY OF
NAIROBI, KENYA**

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of the Degree of Master of Education in Educational Administration**

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DECLARATION

This research proposal is my original work and has not been presented for award of a degree in any other University.

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This proposal has been submitted for examination with our approval as university supervisors.

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DEDICATION

This project is dedicated to my dear wife, Dorcas, my dear son John, my dear daughters Bernice and Deborah who are a real inspiration to me.

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ABBREVIATIONS AND ACRONYMS

APDK	Association for the Physically Disabled of Kenya
CUE	Commission for University Education
CHSS	College of Humanities and Social Sciences
CEES	College of Education and External Studies
CBPS	College of Biological and Physical Sciences
EFA	Education for All
FBO	Faith Based Organizations
FPE	Free Primary Education
IE	Inclusive Education
KISE	Kenya Institute for Primary Education
KSB	Kenya Society for the Blind
KSMH	Kenya Society for the Mentally Handicapped
KSDC	Kenya Society for Deaf Children
LLB	School of Law
LWD	Learners with Disabilities
MOE	Ministry of Education
MDG	Millennium Development Goals
N/A	Not Available
ODEL	Open and distant E-learning

PWD	People with Disabilities
SDG	Sustainable Development Goals
SNE	Special Needs Education
UON	University of Nairobi
UNESCO	United Nations Educational, Scientific and Cultural Organization
UDHR	Universal Declaration of Human Rights
UNCRPD	United Nations Convention on the Rights of Persons with Disabilities
WHO	World Health Organization.

ABSTRACT

The purpose of the study was to investigate institutional factors influencing university management in integrating learners with special needs into college life in the University of Nairobi. This study aimed to determine the extent to which availability of physical infrastructure influences integration of learners with special needs; determine the influence of provision of assistive devices on integration of learners with special needs, and, assess the extent to which adequacy of human resources influences integration of learners with special needs. The study was conducted using descriptive survey design where the target population included twenty-one administrators and thirty learners with disabilities in the college of humanities and social sciences of the University of Nairobi. The respondents were selected using purposive sampling. The administrators in the college of Arts, Law and business were the respondents. These included those in charge of construction and maintenance, Dean of students, Library Medical services, Students Welfare Association, Dean of faculties, and transport. Because of learners being on recess, twenty-one instead of the thirty students with special needs were selected across the three campuses. The researcher instrument for the study included two questionnaires with both open and close ended questions and an observation schedule (one questionnaire for the administrators and one for the students with special needs). Data from the field was edited and coded according to themes which emanated from the research objectives and questions. Data is analyzed using both quantitative and qualitative techniques. Qualitative data was derived from open ended questions in the observation schedule. Quantitative data was from descriptive statistics supported by tables, graphs, pie chart, frequency and percentage. This was done using the statistics package for social sciences (SPSS) computer package. From the findings, the study revealed inadequacies of physical facilities and assistive devices that could assist in the integration of learners with special needs. At the same time, sensitization of students was not done and the number of human resources to help support learners with special needs were inadequate. The learning resources (especially the physical facilities) are not adapted to the needs of learners with special needs. Therefore, the University of Nairobi Management should organize for ways through which physical facilities should be imported to comply with LWD. Assistive devices both for teaching and learning, and those for mobility to be availed. Human resources who understand such conditions to be sourced to assist LWD. The student's sensitization to be done by those tasked to do so. For instance, the office of the dean of students. An independent department could be set by the university to solely deal with issues of learners with special needs. In summary, this study sort to determine the extent to which the availability of physical infrastructure, provision of assistive devices, students' sensitization and adequacy of human resources influence integration of learners with special needs in university life in college of humanities and social sciences of the University of Nairobi.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Inclusive education is a process of addressing the diversity of needs of learners through increasing participation in learning cultures, and reducing exclusion within education (UNESCO, 2003, 2005, and 2009). A study done by Maina (2014) in this area states that the policy of inclusive education is based on the basis of the human rights, equity and diversity. The policy and practice of special education is based on the framework of human rights and equity. The same is founded on the right to education enshrined in 1948 universal declaration of human rights. The Salamanca statement (UNESCO 1994) sums up the benefits of inclusive education by acknowledging that:-

Regular learning centers with inclusive orientation are the most efficient means of combating discriminatory tendencies, building an inclusive society and attaining education for all. Moreover, they provide an effective education to many of the children and finally the cost-effectiveness of the whole education system (Article 2, p.ix)

As per the UNESCO Quick guide to education indicators for SDG4 (2018), the focus on equity aims to ensure that no one is left behind, especially the poorest and the most vulnerable groups. Equity indicators encompass individual characteristics, such as sex, location, ethnicity, language, disability status and engagement in child labor.

From both global and regional perspectives, education for all is paramount. Whether for abled or disabled persons, all are entitled for acquisition of education. That is why inclusive education whereby all learners should be integrated in education systems to acquire knowledge and skills for life is key at every level.

The Kenya government has ratified these international policy frameworks to promote inclusive education. For example, the constitution of Kenya (2010) adopts a right-based approach to education, which provides for the right of all children to free education and compulsory basic education.

Given the current trends of basic education being free and compulsory, transition rates are rising by the day. The latest policy that necessitated us to have 100% transition from the primary to secondary school is one such concern. This could mean that numbers in universities are geared to an automatic increase in the near future. As per the WHO, world report on disability (2012), the global estimates for disability is on the rise due to population ageing and the rapid spread of chronic diseases, as well as improvements in the methodologies used to measure disability. This could translate to mean even children with special needs in schools and colleges will increase.

Given that majority of studies on this subject have been at primary and some few at secondary school levels, it is important to do a study at the university level. This is because we have learners with disabilities.

Examples of such studies are: Astrat (2013) Factors affecting the implementation of inclusive education in primary schools of Bahir Dar Town, Irene (2017) Integration of children with

disabilities into school community and Maina (2014) Influence of Head Teacher leadership development on implementation of inclusive Education in public primary schools in Kiambu County, Kenya.

As stated above, the same numbers could steadily rise in the near future. As we mention of inclusive education, any cycle of a country's education system is considered complete at a university level. For example, the outgoing Kenyan education system is 8-4-4 (8- primary, 4-secondary and 4-university). Even the incoming one 2-6-3-3-3 curriculum has 3 years at the university. As the transition at all levels includes learners with special needs, it is key to have research done on the general management of learners with special needs at even institutions of higher learning.

This study investigates institutional factors influencing integration of learners with special needs in the University of Nairobi. A case study is the college of humanities and social sciences of the University of Nairobi. Given its historical background of being the oldest of the Kenyan public university, The University of Nairobi could provide enough grounds to establish tangible facts of this topic. Apart from the many courses offered attracting many learners from all over the world, the teaching and nonteaching staff also forms a bulk of the human resources required to manage various sectors. The same could mean adequate facilities both in numbers and quality should be made available for such soaring crowds.

A general survey could reveal that the environment (Physical facilities), general sensitization and devices used by learners with special needs could be wanting. This means that even the few cases of disabilities available are going through traumatic moments. This is verified by a

study done by Kirui (2014) on challenges facing regular and special schools in the implementation of inclusive education. This study reveals that learning institutions face challenges in scarcity of human and learning resources. This could be an issue with the University of Nairobi as well. The same matter is confirmed in the study by Ogero (2015) on school-based factors influencing performance of children with disabilities in public primary schools in Kajiado North District.

Studies have also proved that physical facilities and generally the environment is not friendly to learners with disabilities. For instance, a study by Kibias (2015) affirms this. According to this study, a learning institution should have ramps, adapted latrines, enlarged classroom windows, painted walls levelled playgrounds and large classrooms. Otieno (2014) agrees with the above. In addition, he adds that there should be inbuilt group hearing mechanism and feedback mirrors. A survey at the University of Nairobi reveals that the above facilities are not sufficient, and in some cases are lacking. Given the oldness of the university, most infrastructures did not adhere to modern specification that cherishes the phenomena of inclusive education.

Assistive devices are required as well. Most studies reveal that such devices are not adequate. They include Braille, large prints, charts, visual materials, page turners and adapted erasers (UNESCO 2010). Others could be digital devices like talking word processors, speech to text, tactile graphics and so forth. All the above are shown by studies done by Njuki (2017), Obadiah (2012), Omare (2013) and Asma (2015) all on issue touching on inclusive education.

Onyuka (2015) on factors influencing implementation of inclusive education in primary schools in IFO Refugee camp Dadaab, Garissa County, Kenya, mentions the necessity of sensitization in inclusive education. As for the study, we must have training of staff and awareness policies being formulated. Sensitization could focus on support services like emotional, psychological support, progress monitoring assessment and assistants (non-teaching staff or from students). This will boost the information on inclusive education and at last reduce negative stigmatizations and friendly social relations with concerned persons. Integration will be made easy. At the University of Nairobi, sensitization levels are not adequate. This is as per the above study that applies to many learning centers. This study could asses such yawning gaps and provides recommendations for further action.

With the study, some physical facilities could be improved for access and general mobility. Sensitization could enable the general public change their attitudes and learn to co-exist with learners with impairments.

1.2 Statement of the problem

There are efforts from all stakeholders in the provision of education, particularly the government of Kenya, to ensure that learners with disabilities access the education, especially basic education. These include introduction of FPE in 2003, free tuition in day secondary schools in 2008 and so on. As we talk of transition from primary to secondary, institutions of higher learning are not focused. Given that these institutions are the source of manpower to drive the country politically, a glimpse is necessary to check on how these institutions are offering inclusive education.

The study will investigate institutions matters influencing integration of learners with special needs in the University of Nairobi. It is vital to assess the preparedness of the University of Nairobi in integrating learners with special needs. A particular reference is made unto the college of humanities and social sciences of the University of Nairobi, Kenya. The reason for picking on the University of Nairobi is because it is the oldest and pioneer university in the Republic of Kenya. Its being old could make it not updated on some facilities (for instance, infrastructure) to deal with learners with special needs. Thus, the designs were done before the campaigns of inclusive education came to be. The college of Humanities and Social sciences forms nearly 50 percent of the entire University. It's the most diverse and largest, and so attracts many learners with disabilities. There is a possibility of resources' compliance. An assessment will be done to look on the facilities, sensitization and adequacy in human and instructional resources in managing learners with disabilities.

1.3 Purpose of the study

The purpose of the study was to investigate institutional factors influencing university management's integration of learners with special needs in the University of Nairobi.

1.4 Research objectives

- i. To determine the extent to which availability of physical infrastructure influences integration of learners with special needs into the college life at the college of humanities and social sciences, University of Nairobi.

- ii. To assess the extent to which students sensitization influences integration of learners with special needs into college life at the college of humanities and social sciences, University of Nairobi.
- iii. To determine the influence of provision of assistive devices on integration of learners with special need into college life at the college of humanities and social sciences, University of Nairobi.
- iv. To assess the extent to which adequacy of human resources influences integration of learners with special needs into the college life at the college of humanities and social sciences, University of Nairobi.

1.5 Research questions

- i. To what extent does the availability of physical facilities influence integration of learners with special needs into the college life at the college of humanities and social sciences, University of Nairobi?
- ii. How does student sensitization influence integration of learners with special needs into the college life at the college of humanities and social sciences, University of Nairobi?
- iii. To what extent does provision of assistive devices influence integration of learners with special needs into the college life at the college of humanities and social sciences, University of Nairobi?
- iv. How does adequacy of human resources influence integration of learners with special needs into college life at the college of humanities and social sciences, University of Nairobi?

1.6 Significance of the study

Theoretically, the study is expected to contribute to the sphere of knowledge on the institutional factors influencing integration of learners with special needs at university levels. Practically, the study would come up with findings to state how well or ill universities are prepared in implementing inclusive education in this era. The findings are expected to sensitize policy makers like university managers or administrators on the factors to address to make integration of learners with special needs a success in university education. Lecturers, college administrators, workers and students could gain from the outcomes. Through sensitization, awareness could be created and an attitude-change could be experienced over learners with disabilities. This may include the university council, vice chancellor, deputy vice chancellor (in charge of administration, academics), and principals of various colleges.

From its findings, the study could come up with recommendations that could assist to improve the general view of inclusive education.

1.7 Limitations of the study

According to Best and Kahn (2007), limitations are conditions beyond the control of the researcher that may place restrictions on the conclusion of the study and their applications to their situations. As a researcher, I purposed to be as objective as possible as the study tools were developed.

Lack of good relations from the respondents resulted in failure to give information that is instrumental to the success of the research. This was possible especially when dealing with

this area of special needs. To reduce this, the researcher assured the respondents of the confidentiality of their views.

1.8 Delimitations of the study

The study covers only the college of humanities and social sciences, University of Nairobi. The respondents were learners with special needs and the colleges' administrators. This college was selected since it has many learners in many courses. Its pivotal role of housing major head offices of various operations at the university gave it a super concern since much data could be gathered. This study limited itself to institutional factors influencing integration of learners with special needs in the University of Nairobi with a focus on the college of humanities and social sciences, University of Nairobi.

1.9 Basic assumptions of the study

According to Mugenda and Mugenda (2010) they stated that an assumption is any important fact perceived to be true but not actually verified. The research assumed that the information from the respondents would be true. Also, the instruments to be used would give valid and reliable results. Another assumption is that the University of Nairobi is well prepared in integrating learners with special needs as it has minimum resources to this effect. This touches on physical facilities, human resources, assistive devices and sensitization programs.

1.10 Definitions of significant terms

Assistive devices refer to instruments or tools that are used to increase functionality for persons with disabilities in such areas as mobility, communications, hearing and seeing

Inclusive education refer to education systems that are open to all children including those with disabilities. Involve sourcing, planning and organizing the learning environment and participation of learners with disabilities

Learners with special needs refer to learners with various challenges such as hearing, visual and physical impairments and communication problems.

Integration refer to an arrangement whereby the challenged students attends the same college with peers in the University of Nairobi.

Availability of physical facilities refer to degree to which a system, subsystem or equipment is in an operable state in assisting learners with special needs at the University of Nairobi.

Staff and student sensitization refer to attempt to make oneself or others aware of and responsive to certain ideas, events, situation or phenomenon related to learners with special needs in the University of Nairobi.

Human Resources refer to the people who make up the workforce of the University of Nairobi that assist the LWD in dealing with their college life.

College life refers to academic and non-academic activities of LWD of the University of Nairobi.

1.11 Organization of the study

The study is organized in five chapters. The introduction chapter covers the background to the study, statement of the problem, purpose of the study, research objectives, research questions and significance of the study. The limitations, delimitations, basic assumptions and definition of significant terms are also covered in chapter one. Chapter two covers the review of related literature to inclusive education, its historical background and how institutional factors have influenced its implementation at university level. The theoretical and conceptual frameworks are included in this chapter. Section three addresses the research methodology, that is, the research design, target population, sample size and sampling procedures, research instruments, instrument validity and reliability and data collection and analysis techniques. Chapter four shall present the data analysis, interpretation and discussion. Chapter five will focus on the summary of findings, conclusions and recommendations. It also includes suggestions for further research.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This section covers related literature reviewed. To start with, foundations and global perspectives on inclusive education is tackled. The essence of inclusion is also mentioned. In addition to this, a brief history of inclusive education in Kenya is also mentioned. In this literature review a look is observed on how institutional factors like physical facilities, human resources, supportive devices and sensitization to all stakeholders assist in integration of learners with special needs. This chapter concludes with a summary of the reviewed literatures.

2.2 Concept of integration of learners with Special Needs

It is critical to observe that education is a right of every child whether she/he is disabled or not. This is because education equips one to meet the challenges of life. Education involves growing up knowing the environment in which we live in. It is a human right with immense power to transform the environment in which we live as it is a powerful instrument of social change and often initiates upward movement in the social structure (Limaye, 2016). In order to make education for all a reality, every child must have access to quality education.

The UNESCO convention against discrimination in education (1960) and other International human rights treaties like the Universal Declaration of Human Rights (1946), convention on the Rights of Child (1989), and UN Convention on the Rights of persons with Disabilities (2006) prohibit any sort of exclusion from educational opportunities on the basis of sex, ethnic

origin, language, religion, nationality, socio-economic conditions, abilities and so on. However millions of children continue to experience exclusion with (and from) education systems across the world. From both global and regional perspectives, education for all is key. All are entitled for acquisition of education. That is why inclusive education whereby learners should be integrated in education systems to acquire knowledge and skills for life is vital at every level.

About 15 percent of the world's population (or one billion people) lives with some form of disability (WHO world report on disability). The global disability prevalence is higher than previous WHO estimates which date from 1970's and suggested a figure of around 10 percent. This global estimate for disability is on the rise due to population ageing and the rapid spread of chronic diseases, as well as improvements in the methodologies used to measure disability. This is what makes both global and regional agencies to advocate for inclusive education since the populations of those with disabilities continue to soar each day. Such agencies include the 1989 United Nations Convention on the Rights of the Child, the 1990 African Charter on the Rights and welfare of the child, Salamanca statement of 1994, the framework for action on special needs education (1999) and others.

2.3 History of special Education in Kenya

This history is stated in the final draft of the National Special Needs Education Policy Framework of 2009. This policy states that Kenya's earliest effort for organized care and provision of special needs education dates back to the late 1940's, with much involvement of the religious institutions. Special Needs Education is mainly offered to four categories of

children with disabilities namely; children with hearing impairment, mental handicap, visual impairment and those with physical handicap.

Since independence, there has been various policy recommendations given by education commissions and committees. Recommendations of commissions have been used to direct and advise on the provision of education to learners with special needs. The state has developed a number of policy guidelines for SNE dating back to 1964. There are also two legal frameworks that enhance inclusion. These are the constitution of Kenya (2010) on the bill of rights and the Universities' Act no.42 of 2012 as a function of the placement board. The two documents above mention that persons of disabilities should not be discriminated upon. This means that the universities, the UON included, must be inclusive in even dealing with LWD.

2.4 Availability of physical infrastructure or facilities in the implementation of inclusive education

These facilities are key if any meaningful education is to be realized for learners with special needs. The physical resources range from those for tuition, sanitation, accommodation or boarding and recreational ones. Such infrastructural and environmental facilities ensure a habitable environment for persons with special needs and disabilities (MOE Policy framework, 2009). This policy goes on to state that the physical environment where learners with special needs operate should be accessible and be disability friendly. As observed, currently, the learning environment, including the location of institutions, buildings, amenities, equipment and the furniture, pose accessibility challenges to learners with special needs.

According to Burgstahler (2008) on the issues of universal design in education, he states that the physical facilities are important for inclusive education practice. These include an accessible environment which may include building ramps, accessible toilets, enlarged doors, and a well-planned layout. Organization of the furniture is also important. There should be enough space for all learners especially for the using assistive devices such as wheelchairs and crutches. Desks arranged in neat, orderly rows may make movement throughout the class easier. To add to this, Allien (2001) adds that it is the responsibility of the management to ensure that materials and equipment are free of cracks and splinters and in good working order.

A study done by Maina (2004) in this area observes that the structures and design features of most buildings raise safety concerns. For instance, though available, some buildings could have grilled windows, narrow and steep stairs, no ramps or elevators, no fire emergencies and so on. The above environment is a threat to integration of learners with disability in any University. Other latest studies that broadly tackle this issue of physical infrastructure to enable inclusive education are: Kirui (2014), Kibias (2015), and Otieno (2014).

As a world class university committed to scholarly excellence, the University of Nairobi must meet the tenets of availing, physical facilities to nurture learners of special needs. The facilities provided must be in good state with programs of maintenance in place at all levels.

This is because, with large numbers of learners with special needs, the University of Nairobi may not have sufficient numbers of assistive devices and human resources to deal with rising cases of such learners. In addition, it being an old university, the layout may not reflect a

special needs friendly environment. Given the design of the most structures were done before the global campaigns for inclusive education, some amenities like ramps, elevators, and spacious and well-ventilated classrooms may be lacking in some areas. The same is justified globally when Asmar (2015) in the periodical entitled “What is your opinion on making universities inclusive for students with special needs?” This writer confirms that the universities in Lebanon have buildings that are built not for disabled.

2.5 Students’ sensitization in the implementation of inclusive education

This concerns the mechanism that have been put in place to make sure that there is free flow of information concerning inclusive education. All stakeholders must have some knowledge about learners with special needs.

Students, who form the corner-stone of this study, require the awareness stated. The first program for sensitization to students emanates from the base of induction. According to Farrel and Ainscow (2002), it is not sufficient for children to simply be present in a school. They have to be welcomed and accepted by the school. This is to say that there must be a strategy to induct and orientate the students as they report to the University for learning. The management should expose the learners to what entails them to know as new learners. The abled and disabled students need to be told the importance of co-existing.

Another key area of awareness to students is about guiding and counseling. There is to be mechanisms in place that learners of all sorts are guided and counseled in good styles of living in institutions of higher learning. As a case study of the University of Ljubljana, <https://www.uni.Lj.si/study/information/citizens-special-needs/> there must be career centers

that should provide students with special needs with career counseling, support in the choice of study and inclusion in the study process. Given that some disabilities come with pains, suffering, stress and negative stigmatization, it is of essence that counseling programs are put in place to address such traumas. Sensitization could focus on support services like emotional, psychological support, progress monitoring assessment and assistants (non- teaching staff or from students). Failure to have learners of special needs being molded, they will feel left out and this will defeat the logic of inclusive education.

2.6 Assistive devices in the implementation of inclusive education

To make the climate of learning worthwhile for the learners with special needs, some devices for assisting them manage their conditions are quite necessary. These devices range from those to help enhance mobility, visual loss, hearing impairment and so on. In turn, this will assist in accessing information and places with much ease.

According to study done by Njuki (2007), the devices may include large prints, regular materials in Braille, charts and visual materials. She goes on to observe that the learners with writing challenges may use adapted pencils, page turners, and head pointers (UNESCO, 2010). As per the MOE policy on totally integrated quality education and training of 1999, it recommends wheelchairs for those learners with severe paralysis of the lower limbs. Those who are visually impaired require Braille machines, spectacles and white canes; while those with hearing impairments require hearing aids where necessary. The same periodical mentions that, in the University of Birmingham, assistive devices are scanty.

For instance, in the case of the blind, special equipment is lacking. These include computers with speech synthesis and braille embosses.

2.7 Adequacy of human resources in the implementation of inclusive education

To make learning possible for learners with special needs, we have a category of personalities who should be present to make the process possible. These range from the teaching staff to the non-teaching ones. Apart from having general knowledge in inclusive education, we must have people who have deeper insights in the inclusive education to assist the learners of disabilities fully. A study done by Melanie (2015) in this area observes that despite having some teachers trained in special education, and special needs educators in almost every school, there is still lack of manpower and expertise to achieve full inclusion. The convention on rights of persons with disabilities (UN) states that in order to help ensure the realization of inclusive education, state parties should employ teachers, including teachers with disabilities, who are qualified in sign language, and/or Braille. The national special needs education policy frameworks outline some personalities who should be present to make learning of learners with special needs cope. These are the support staff-in SNE such as physiotherapist, sign language interpreters and braillists. All these should be provided in institutions enrolling learners with special needs. Others could be guides and readers for visually impaired learners. These are experts who could assist in areas of consultancy should any mess be noticed. Sepkenya.com/index.php/membership/special Education professionals on helping you help your child enlists other types of human resources needed. These are: Special education lecturers, speech and language therapists, occupational therapists, psychologists, learning specialists and physiotherapists.

Depending on the condition of disability, the above could come in to mitigate to make the integration of learners with special needs more workable, especially at the university levels.

Though the University of Nairobi could be having some of these human resources, this study will help establish whether the numbers are sufficient compared to the population of learners with special needs.

2.8 Summary of related literature review

From the Wikipedia free encyclopedia of EFA and inclusion, inclusion is a main component that is used with EFA. There are predictions that by 2025, the numbers of children with disabilities will have risen. A majority of that number will be children with developing countries. Kenya, being part of this world order should not be left behind in addressing issues relating to inclusive education. As many studies have focused on learners of special needs in primary and secondary needs schools, there is need to focus on institutions of higher learning. That is why the literature review, apart from tackling issues to do with inclusion globally, regionally and nationally, it has also explored on factors influencing integration of learners of special needs in universities. Key among them is availability of physical facilities, sensitization of students, and provision of assistive devices and adequacy of human resources. From various authors and studies that have been done on this topic, nothing substantial could be done in learning institutions, if the above factors are overlooked. In some cases physical facilities are never adequate, we have minimal levels of students' sensitizations and even assistive devices for LWD are never sufficient. The provision of human resources to assist

SNE learners is often an issue. The case study on this topic of inclusion concurs with this view. This study could verify further the above gaps in the University of Nairobi and give necessary recommendations. It is up to the concerned parties, especially at management levels, to see to it that the factors stated are tackled fully if at all inclusive education could meet its targets.

2.9 Theoretical framework

This study is guided by the social model of disability as discussed by Raser (2002). This model states that the society should view the issue of integrating PWD from a human right and equality perspective rather than focus on them as faculty. As per the study done by Marias (2014), the social model hints that it is the community that caused the individual with the physical or psychological differences to be disabled. Thus, persons with impairment are not disabled by their disabilities but by the barriers that exist in the society which do not take into account their needs. The barriers are environmental, economic and cultural. As per the study done by Marias (2014), the environment disables impaired people by not being accessible enough for them to move, function and communicate as effectively as possible without hindrances. Culturally, society negates impaired people because of their prejudicial views and negative shared attitudes of non-impaired community towards people with physical and psychological impairments. According to a study done by Kibias (2015), PWD are often made to feel that it is their own fault that they are different. The social model categorically states that impairment does not make PWD less human being. The solution to the problem of disability lies in the restructuring of the society, and not focusing on the individual's impairment.

Kibias (2015) in his study observes that in the social model, children with challenges could experience hurdles in the education system such as extensive, demanding, and inflexible curriculum, inaccessible college environment, lack of adequate materials and negative attitude . As per study done by Onyuka (2015), the college should work towards the removal of barriers to learning and create an enabling and supportive environment for LWD.

This social model applies to this study because LWD are locked out of education due to college-based barriers such as attitude, physical barriers and inadequate teaching and learning resources. For integration to be realized, such barriers ought to be removed. This study will use social model of disability since it advocates for inclusive education and encourages the removal of barriers that obstructs learners with special needs from accessing quality inclusive education.

2.10 Conceptual Framework

Reinchel and Ramel (1987) defined conceptual framework as a set of broad ideas and principles taken from relevant fields of inquiry and use to structure a subsequent presentation. Below (figure 1.1) is the conceptual framework for the institutional factors influencing university management in integrating SNE learners and influence variables.

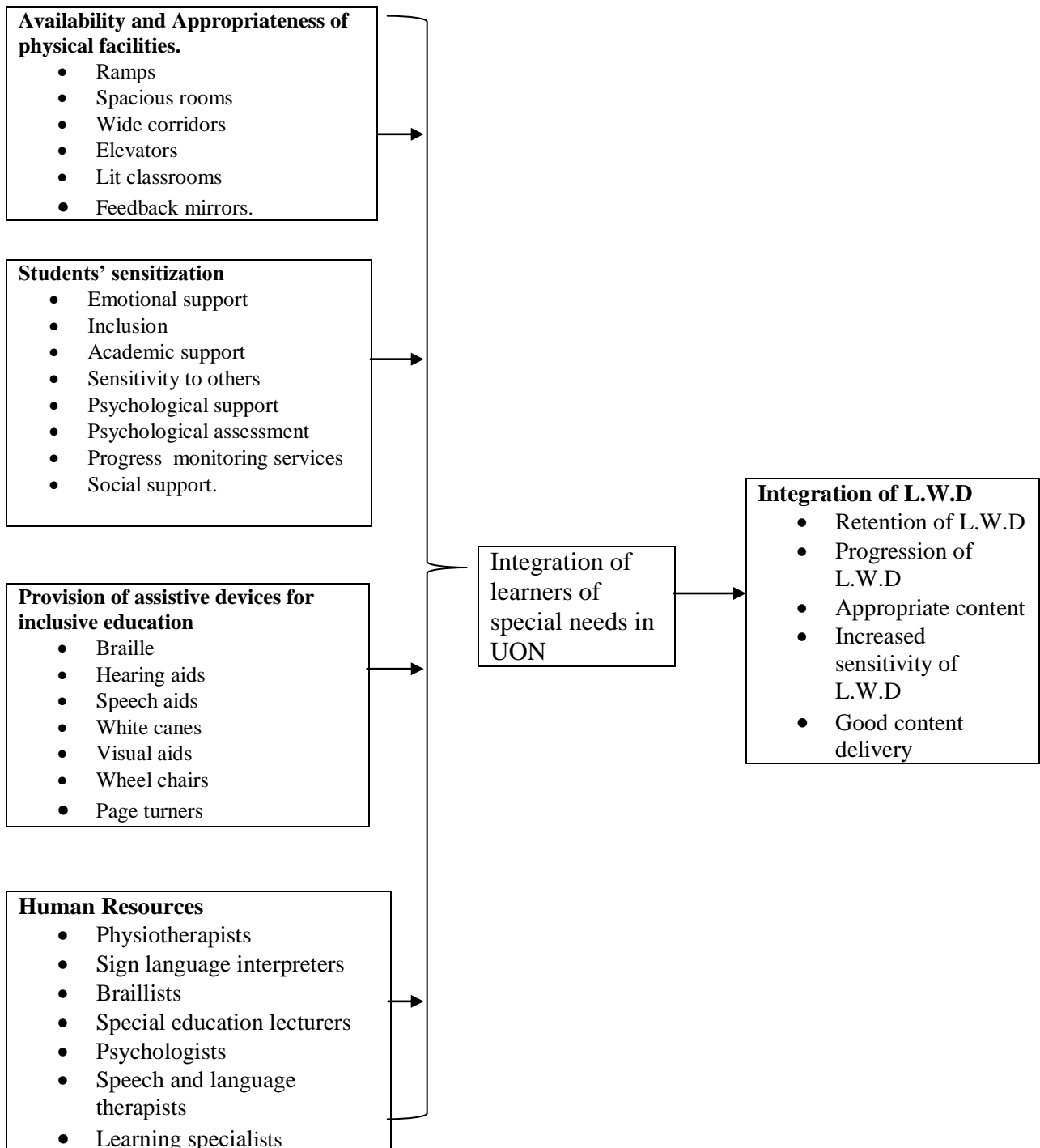


Figure 2.1 Institutional Factors Influencing University Management's in Integrating of Learners with Special Needs into College Life in the University of Nairobi, Kenya

From the above framework, various factors contribute towards integration of learners with special needs in university education. These include availability and appropriateness of physical facilities- like adapted toilets, ramps, spacious rooms, elevators, pavements, leveled play grounds and so on. Students' sensitization is vital for creation of awareness on inclusivity. This could be done through emotional, academic, psychological and social support systems. Sensitivity to others, psychological assessment and progress monitoring services could also form part of the students' sensitization. The human resources are key as well. These include special education lecturers, physiotherapists, sign language interpreters, braillists, psychologists and learning specialists. In addition, there is need for system devices for learners with disability. These includes: braille, hearing aids, speech aids, visual aids, charts, wheelchair, page turners and even large prints. If the above factors are put in place, integration of learners with special needs in the University of Nairobi education system could be made easier. Among the outcomes, we shall have increased retention levels of LWDs, high progression levels of LWD, appropriate content being taught and good content delivery. Sensitivity of LWD could also be increased.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter gives the outline of the proposed methodology that was used in the study. Its components include the proposed research design, target population, target sample and sampling procedure, data collection procedure, data analysis techniques and ethical considerations.

3.2 Research design

A descriptive survey design could be used since it is widely acknowledged as an appropriate strategy for capturing the opinions, perceptions and attitudes of the people about events. According to Mugenda and Mugenda (2010), survey is defined as a means of collecting data from members of a population with respect to one or more variables. From the study carried by Marias (2014) survey research a self-report which requires the collection of information from the sample. It can be used to generalize findings. This design is reliable because it enables the researcher to establish the status of physical facilities, students' sensitization, assistive devices and human resources for inclusive education in the University of Nairobi.

3.3 Target population

According to Borg and Gall (1989), the target population is defined as all the items of real or hypothetical set of people, event or objects which the researcher wishes to generalize the results of the study. The target population of this study could comprise of fifteen

administrators and thirty students of the college of humanities and social sciences of the University of Nairobi.

The sources of the thirty LWD are from the records of the dean of students of UON. The administrators in target have been retrieved from the university website on staffing of UON.

3.4 Sample size and sampling procedures

A sample is a finite part of a statistical population whose properties are studied to gain information about the whole (Kombo & Tromp – 2006). It is a set of respondents selected from a larger population for the purpose of survey.

In this study, the researcher shall use a census for the targeted administrators and LWD. The research will apply a purposive sampling for all the learners that will participate in the study. As stated in delimitations, the study will be limited to the college of humanities and social sciences of the University of Nairobi.

3.5 Research instruments

The researcher intends to use three main methods for collecting the data. Questionnaires, interviews and observation guides. Kothari (2008) explains that questionnaires are commonly used to gather important information about a population. As per this study, questionnaire and interview schedules could be used to capture data on availability and appropriateness of physical facilities, student sensitization, assistive devices and human resources for inclusive education, Observation schedule could be used to seek information on availability and appropriateness of physical facilities and provision of assistive devices for inclusive education.

3.6 Instrument validity

As per Frankfort (1996), validity is concerned with the question “am I measuring what I intend to measure?” This is to say that it refers how well a test measure. What it is supposed to. Content validity could be used in this study.

To enhance the content validity of the instruments, a trial run of the instruments will be carried out. The feedback to be discussed with supervisors who could help to improve the instruments’ ambiguities and errors.

3.7 Instrument reliability

As per Upadage and Slende (2010), reliability refers to consistency throughout a series of measurements. That is to say, if a respondent gives out a response to a particular item, he/she is expected to give the same response to that item whenever he is asked subsequently. The researcher could use a test-re-test technique in order to test the reliability of the instrument. The respondent would be given the same question after two weeks. A comparison of the two tests could be made using Pearson’s correlation coefficient formula.

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$$

According to Gay (1992), coefficient values ranging between 0.6 and 0.9 determine the instrument reliability. The researcher would consider 0.7 as a reliable correlation coefficient.

3.8 Data collection procedures

The researcher will be cleared by the School of Education, University of Nairobi. The following step will be to seek for a permit for data collection from the National Commission

for Science, Technology and Innovation . Thereafter, the Dean of the School of humanities and social sciences office will be contacted to give an introductory letter to lecturers, students and other people involved. The lecturers, the Dean of Students and other administrators required in the study will be contacted to inform them of the study and prior arrangements will be made to see the students of special needs).

3.9 Data Analysis Techniques

Data from the field will be sorted out classified and categorized under major themes which could emanate from the research objectives and questions. Data collected will be analyzed using qualitative and quantitative techniques. Qualitative data shall be derived from open ended questions in the questionnaire and in the observation schedule. Quantitative data shall be derived from descriptive statistics supported by tables, graphs, pie charts, frequency and percentage. This could be done using the statistics package for social sciences (SPSS) computer package.

3.10 Ethical consideration

When dealing with learners with disabilities, ethical issues are very critical. The researcher intends to assure the respondents that the data obtained from them would be used for academic purposes. The respondents for the study to voluntarily agree to participate in the research. Their safety while participating in the research to be assured. The respondents would be assured of confidentiality and anonymity. The researcher will seek the opinion of LWD to see them. Such ethical consideration is aimed at dealing with fabricating, falsifying or misrepresenting the data obtained.

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND DISCUSSIONS

4.1 Introduction

This chapter presents data analysis, interpretation, presentation and discussion of findings. The purpose of this study was to investigate institutional factors influencing University Management in integrating learners with special needs into college life in University of Nairobi. The study was organized based on the objective of the study including availability of physical infrastructure student's sensitization, assistive devices and adequacy of human resources, how the above four items influence the integration of learners with special needs in the college life of the University of Nairobi.

4.2 Response Rate

A total of 45 respondents were therefore targeted by the study (including 15 administrators and 30 students). The findings are in table 4.1 below.

Table 4. 1 Response Rate

Respondents	Sample size	Responses	Response Rate
Administrators	15	21	100
Students	30	21	70
Total	45	42	85

As per the study carried out by Marias (2014), it is observed that a questionnaire return rate of 80 percent and above is absolutely satisfactory, while 60 – 80 percent return rate is quite satisfactory. A return rate below 60 percent is barely acceptable. This could mean that the return rate for this study was good.

Before embarking on giving the findings of various variables under stud, it is of essence that a survey is done on the demographic data of respondents. This section will majorly dwell on the demographic data of the learners with special needs in the college of humanities and social sciences.

4.3 Demographic Data of the Respondents.

Before a study is made on the College of Humanities and Social Sciences, it is of essence to have a preview on the state of numbers and types of disabilities in the entire UON. This will give a general picture of the entire institution of which the College of Humanities and Social Sciences is part of. As per the records from the dean of students of the UON, there is data that captures Learners with Disabilities in terms of gender and disability types across all the colleges. Among them, we have College of Education and External Studies, College of Humanities and Social Sciences, College of Biological and Physical Sciences, Engineering, and Open and distant E-learning . The findings were as follows:

Table 4. 2 Students with disabilities (2013-2018)

Disability type	No. of students	%
Hard of hearing	14	14.7
Visually impaired	30	31.6
Physically challenged	45	47.14
Albinism	3	3.2
Epilepsy	1	1.1
Speech	2	2.1
Total	95	100

From the above records, the majority of the disability cases are the physically challenged with 47.4 percent. It is followed by visual cases that form 31.6 percent. The same findings are confirmed by Astrat, (2013) in his unpublished Masters project entitled Factors affecting the implementation of inclusive education in primary schools of bahir Dar town. These big numbers of the physically challenged and visually impaired calls for streamlining on the part of physical facilities, assistive devices, sensitization and also making the human resources required adequate enough.

Table 4. 3 Students with disabilities (2013- 2018)

Gender	No. of students	%
Male	67	70.5
Female	28	29.5
Total	95	100

The male LWD form the majority of the special needs students at 70.5 percent. On the part of CHSS (that forms my delimited area of this study) it was essential for the study to gather data on the students' background in terms of gender, age and types of disabilities. These students' demographic data is summarized as follows.

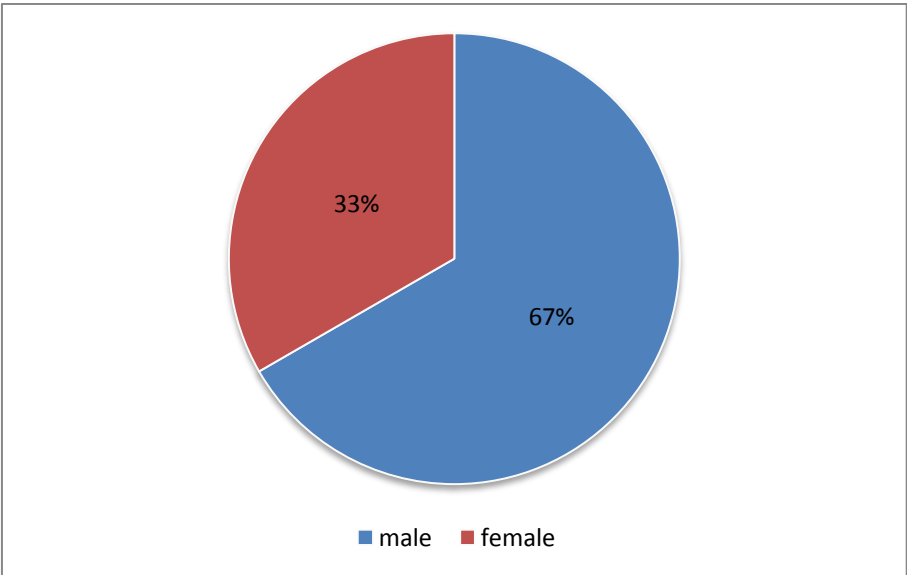


Figure 4. 1 Distribution of respondents by gender

It was revealed that 67 percent of the students' respondents with special needs were male. 33 percent of the LWD were female. This could show that the study highlighted that the LWD in the CHSS were predominantly male.

Table 4. 4 Responses of ages for the LWD

Age (years)	Frequency	Percentage
20-22	10	48
23-25	9	43
26 and above	2	10

From the study above, majority of the students were twenty three years old since it formed thirty percent of the respondents. The lowest percentage was five. This could have shown the new students who were in their starting years. (20 years). The one of twenty years could have suggested that the conditions that were not habitable for LWD could make some extent their stay in college.

These age brackets of 20-28 years are a particular range for university student's age. This is informed by a study done by a Kibias (2015) on school based factors influencing inclusion of learners with disabilities. This study stated that high school children were aged between 14-19 years. This meant that majority of those in twenties could be college or university students.

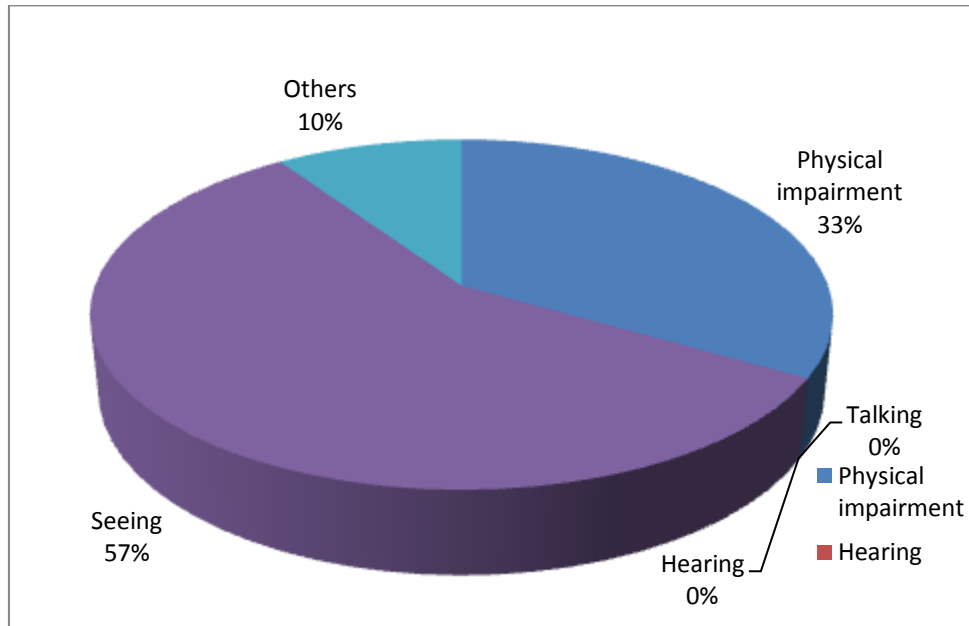


Figure 4. 2 Forms of special needs studied in CHSS

Of the LWD that formed the respondents of the study, those with seeing impairment formed fifty seven percent. Thirty- three percent of the respondents were having physical impairments. The study didn't capture the learners with hearing and talking disabilities. Ten percent formed the category of others. In the case of this study, this was the condition of those with albinism. This meant that the University was to do more in improving conditions for physically challenged and visually impaired learners since as from the findings; such numbers were already accommodated by

the university. Other conditions like hearing and talking could be considered since at the undertaking of this study, certain categories of students were on recess. It is of essence to also know the special needs or the conditions of LWD as was gotten from the dean of students' records from CHSS. Figure 4.3 below summarizes what was found.

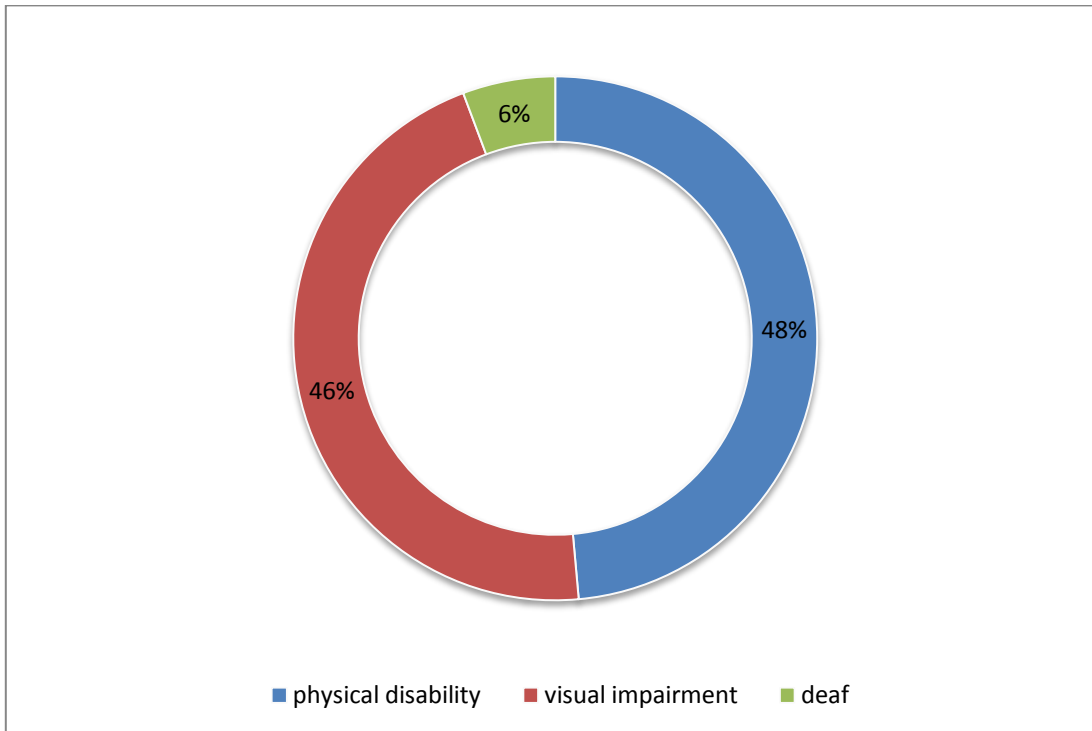


Figure 4. 3 Responses on special needs/ conditions of LWD from the dean of students’ records for CHSS

From the latest records of LWD in the CHSS at the dean of students, 48 percent of the students' respondents were with physical disability while forty six percent formed those with visual impairment. Finally, six percent were those with hearing problems. Results showed that physical impairment was the most prevalent of all other forms of disabilities.

4.4 Influence of physical infrastructure in integrating learners with special needs

4.4.1 Analysis of the data from the specific view

This section presents administrators, students and researchers observation schedule responses on the availability of physical resources and how they influence the integration of learners with special needs.

Table 4. 5 Administrators response on availability of Physical Facilities

Facility	Availability	Frequency	Percentage
Special toilets	Adequate	9	42.86
	Inadequate	2	9.52
	N/A	10	47.62
	Total	21	100
Ramps	Adequate	12	57.14
	Inadequate	2	9.52
	N/A	7	33.34
	Total	21	100
Wide corridors	Adequate	16	76.19
	Inadequate	2	9.52
	N/A	3	14.29
	Total	21	100
Lit- rooms	Adequate	16	76.19
	Inadequate	3	14.29
	N/A	2	9.52
	Total	21	100
Levelled playgrounds	Adequate	8	38.10
	Inadequate	4	19.04
	N/A	9	42.86
	Total	21	100
Elevator	Adequate	4	19.05
	Inadequate	4	19.05
	N/A	13	61.9
	Total	21	100
Spacious rooms	Adequate	14	66.67
	Inadequate	4	19.05
	N/A	3	14.28
	Total	21	100

From the findings in the Table 4.5, majority of the university administrators state that apart from a few, a majority of the physical facilities are available for learners with disability. These are wide corridors, lit rooms and spacious rooms. Given that the above items are required by all learners, there is no concern of saying that integration of LWD was put into account. Items that could facilitate integration are recorded in average percentages like ramps, special toilets and elevators. These patterns of availability imply that integration of SME is yet to be realized to the fullest. This depicts that physical facilities available in the University of Nairobi are not adequate for the inclusion of learners with special characters. Students had similar findings as presented in the Table below.

Table 4. 6 Students responses on availability of Physical Facilities

Facility	Availability	Frequency	Percentage
Marked paths	YES	0	0
	NO	21	100
	Total	21	100
Ramps	YES	9	42.86
	NO	12	57.14
	Total	21	100
Levelled playgrounds	YES	3	14.29
	<u>NO</u>	18	85.71
	Total	21	100
Wide doors	YES	8	38.10
	<u>NO</u>	13	61.90
	Total	21	100
Special toilets	YES	5	23.81
	<u>NO</u>	16	76.19
	Total	21	100

Elevators	YES	0	0
	<u>NO</u>	21	100
	Total	21	100
Lit rooms	YES	12	57.14
	<u>NO</u>	9	42.86
	Total	21	100
Spacious rooms	YES	12	57.14
	<u>NO</u>	9	42.86
	Total	21	100

In fact as per the students' findings, only lit rooms and spacious rooms scored above 50 percent. The rest were below this mark with even marked paths and elevators scoring 0 percent each. This in itself implies that students' findings denote that the availability of physical facilities is wanting. This means, it has some influence on the integration of learners with special needs. Lit rooms and spacious rooms alone cannot lead to integration. Key items that seem abandoned like special toilets, ramps and elevators must be availed too. A study done by Ogero, (2015) on school based factors influencing performance of children with disabilities in public primary schools in Kajiado North district depicts a similar scenario. As for him, physical facilities to enhance special education in learning institutions are in dire states.

Table 4. 7 Researcher’s Observation on Physical Facilities

Facility	Availability	Frequency	Percentage
Toilets	Available	2	28.57
	<u>Not available</u>	5	71.43
	Total	7	100
Ramps	Available	3	42.86
	<u>Not available</u>	4	57.14
	Total	7	100
Wide corridors	Available	6	85.71
	<u>Not available</u>	1	14.29
	Total	7	100
Wide doors	Available	5	71.43
	<u>Not available</u>	2	28.57
	Total	7	100
Rails along walls	Available	7	77.78
	<u>Not available</u>	2	22.22
	Total	9	100
Elevators	Available	1	14.29
	<u>Not available</u>	6	85.71
	Total	7	100
Lit Classrooms	Available	6	85.71
	<u>Not available</u>	1	14.29
	Total	7	100
Spacious	Available	4	57.14
	<u>Not available</u>	3	42.86
	Total	7	100

In totality the researcher observed that majority of the physical facilities were lacking. The rest were in minimal numbers as shown in table 4.7.1. Key ones that could have enhanced integration like ramps, special toilets and elevators were few. The researcher observed that some (like elevators) were only found in main campus. The school of business and school of law had none.

In addition to the mentioned medical facility, the researcher also observed the availability of other items as enlisted in the table below.

Table 4. 8 Continuation of Researcher’s Observation on Physical Facilities

Feedback Mirrors	Available	0	0
	<u>Not available</u>	7	100
	Total	7	100
Wheel chairs	Available	1	14.29
	<u>Not available</u>	6	85.71
	Total	7	100
Leveled playground	Available	4	57.14
	<u>Not available</u>	3	42.86
	Total	7	100
Modified games equipment	Available	0	0
	<u>Not available</u>	7	100
	Total	7	100
Cut-out desks	Available	0	0
	<u>Not available</u>	7	100
	Total	7	100
Adapted bathrooms	Available	0	0
	<u>Not available</u>	7	100
	Total	7	100
Hostel disability friendly	Available	0	0
	<u>Not available</u>	7	100
	Total	7	100
White canes	Available	0	0
	<u>Not available</u>	7	100
	Total	7	100

Ogeno (2015) in the study school based factors influencing performance of children with disabilities in public primary schools in Kajiado North on facilities states that the state of classes corresponds with the status report on implementation of the rights of persons with disabilities in Kenya. This was filed by Kenya National Commission of Human Rights in July 2014. This report found out that learning facilities were inadequate in integrated, mainstream and special schools.

Although the university campuses under study had tried to make university facilities for LWD friendly, a lot of discrepancies were evident. There were minimal ramps, elevators, adapted toilets, and in some cases, we had none of such.

This confirmed that LWD continued to face serious challenges in their mobility and accessing of key areas in their stay in college. We had no special playing grounds for LWD in the 3 studied campuses. This implied that students of special needs are left out when it comes to matters of games in all the colleges with such learners having talents to be exploited, they must be supported like the rest of the learners who were physically okay. Any deviation from this is an act of discrimination that should not be allowed.

4.4.2 Analysis of the data from the general view

Table 4. 9 Administrators' response on availability of physical facilities

Physical facilities	Availability (%)	Not Available (%)
	58.5029	41.4971

As per the t-test analysis, the 21 observations revealed a mean of 4.0952 of those

administrators who said the physical facilities were available and a mean of 2.9048 of those who said that they are not available. That is:

Ho: There was no significant difference between the means.

H₁: There was a significant difference between the means.

P (T<=t) one-tail = 0.101384016. Since 0.101384016 > 0.05, reject the null hypothesis, hence there is a significant difference between the means. With such a difference in means, it means that the availability of physical facilities does not influence the integration of learners with special needs.

Table 4. 10 Students' response on availability of physical facilities

Physical facilities	Availability (%)	Not Available (%)
	36.0543	63.9457

As per the t-test analysis, the 21 Observations revealed a mean of 2.5238 of the students who said the physical facilities were available and a mean of 4.4762 of those who said that the physical facilities were not available. That is:

Ho: There was no significant difference in the means.

H₁: There was a significant difference in the means.

P(T<=t) one tail= 0.01802591. Since 0.01802591 < 0.05, accept the null hypothesis, hence there is no significant difference between the means. With such a difference in means, it

means the availability of physical facilities influences the integration of learners with special needs.

4.5 Students' sensitization and its influence on integration of learners with special needs.

4.5.1 Analysis of the data from the specific view

The researcher wanted to investigate whether student sensitization influences integration of LWD. On the same, students with special needs were asked to state whether they underwent any induction or a sensitization process to make them cope with university life in the prescribed areas. These included emotional, academic, social, co-curricular and sensitivity to others. The responses were as follows;

Table 4. 11 Students' responses on whether they were inducted or sensitized in these areas

	Per	Yes		No	
Emotional Support	21	4	19.05	17	80.95
Academic Support	21	2	9.52	19	90.48
Social Support	21	6	28.57	15	71.43
Co-curricular Support	21	3	14.29	18	85.71
Sensitivity to others	21	1	4.76	20	95.24

As respondents, students observed that minimal sensitization took place. Of all the areas in question, none of them scored above 30% in frequencies. This could mean, the learners with disabilities had a rough time in coping with college life, whether academically or even non-

academically. As stated, lack of a emotional support, academic support, social support, co curricular support and being taught to be sensitive to others would leave LWD to be misfit all over the place. This could demean the ideology of integration since the levels of discrimination could be alarming.

This was in contravention with Florian (2000) who observed that awareness about inclusive practices, information is also required to effectively implement these dealings, as skills and ideas are required to make adaptations to meet individual needs.

To understand these issues of students' sensitization, the administrators were asked to state, as students' handlers, as to whether they were trained in areas of inclusive education.

This touched on the area of inclusive education, sign language training, braille training, guiding and counseling training and learning disabilities training. The findings were as follows.

Table 4. 12 Administrators response on students’ sensitization

Facility	Availability	Frequency	Percentage
Training-in inclusive education	Trained	6	28.57
	Not trained	15	71.43
	Total	21	100
Sign-language training	Trained	4	19.05
	Not trained	17	80.95
	Total	21	100
Braille training	Trained	4	19.05
	Not trained	17	80.95
	Total	21	100

Guidance and counseling training	Trained	9	2.86
	Not trained	12	57.14
	Total	21	100
Learning disabilities training	Trained	6	28.57
	Not trained	15	71.43
	Total	21	100

As stated in table 4.9 above, the administrators were not sensitized in handling learners with special needs. Of the areas mentioned, none of them recorded a 30 percent mark, this was too serious since this is a carda of persons who could help nurture integration of learners with disabilities. Their not being informed in the enlisted areas makes it hard to have LWD integrated. This is a sorry state since, Asmar (2015) in making universities inclusive for students with special needs states that the academic staffs need to be told about the specific problems that students have. As key mentors of the learners they could assist much in sensitizing students in the stated areas.

4.5.2 Analysis of the data from the general view

Table 4. 13 Administrators' responses on students' sensitization

Students' sensitization	Trained (%)	Not Trained (%)
	26.666	73.334

As per the t-test analysis, the 21 observations revealed a mean of 1.3333 of the administrators who stated that student's sensitization had been done and a mean of 3.6667 of those who said that they were not trained.

That is:

Ho: There was no significant difference in the means.

H₁: There was a significant difference in the means.

P (T<=t) one tail= 0.00077055. Since 0.00077055 < 0.05, accept the null hypothesis, hence there is no significant difference between the means. With such a difference, it means that sensitization influences the integration of LWD.

Table 4. 14 Students' responses on sensitization

Student sensitization	Sensitized (%)	Not sensitized (%)
	16.19	83.81

As per the t-test analysis, the 21 observation revealed a mean of 0.8095 of the students who accepted that they were sensitized and 4.2381 of those who stated that they were not sensitized. That is:

Ho: There was no significant difference in the means.

H₁: There was a significant difference in the means.

P(T<=t) one tail= 2.97761E-06. Since 2.97761E-06 < 0.05, accept the null hypothesis, hence there is no significant difference between the means. With such a difference in mean, it means that the sensitization of students influences integration of learners with special needs.

4.6 Influence of provision of assistive devices on integration of learners with special needs.

4.6.1 Analysis of the data from the specific view

This section answered the question: To what extent does provision of assistive devices influences integration of learners with special needs into college life at the college of humanities and social sciences at the University of Nairobi?

The researcher sought the responses of the administrators, the students with special needs and no observation schedule which he used by himself. The stated respondents were required to state whether the devices (teaching and learning resources) were adequate, inadequate or not available.

To start with, an observation will be done on the outcomes of the administrators.

Administrators' responses on provision of Teaching/ Learning resources (devices)

Table 4. 15 Administrators response on Teaching/ Learning resources

Facility	Availability	Frequency	Percentage
Text books	Adequate	7	33.33
	Inadequate	3	14.29
	N/A	11	52.38
	Total	21	100
Braille	Adequate	6	28.57
	Inadequate	1	4.76
	N/A	14	76.19
	Total	21	100
Hearing aids	Adequate	3	14.29
	Inadequate	2	9.52
	N/A	16	76.19
	Total	21	100
Speech aids	Adequate	3	14.29
	Inadequate	2	9.52
	N/A	16	76.19
	Total	21	100
Visual aids	Adequate	3	14.29
	Inadequate	2	9.52
	N/A	16	76.19
	Total	21	100
Large prints	Adequate	5	23.81
	Inadequate	0	0
	N/A	16	76.19
	Total	21	100

As per the findings in this section, it was observed by administrators that teaching and learning resources are not adequate CHSS. These assistive devices that form a bulk of items required for any integration are so scanty. While contributing on this, a study done by Maina (2014) on head teachers leadership development on implementation of inclusive education, he states that the universal design for learning relies on digital media and networked environments, that is why items like radio, video, special computers, TV's and other aids are required for inclusive education. When sought to respond on the availability of the above items, the administrators had the following to say:

Table 4. 16 Administrators response on Teaching/Learning resources

Facility	Availability	Frequency	Percentage
TV	Adequate	3	14.29
	Inadequate	0	0
	N/A	18	85.71
	Total	21	100
Radio	Adequate	2	9.52
	Inadequate	1	4.76
	N/A	18	85.72
	Total	21	100
Video	Adequate	3	14.29
	Inadequate	2	9.52
	N/A	16	76.19
	Total	21	100
Head pointers	Adequate	2	9.52
	Inadequate	1	4.76
	N/A	18	85.72
	Total	21	100

Pen holders	Adequate	1	4.76
	Inadequate	1	4.76
	N/A	19	90.48
	Total	21	100
Special computers	Adequate	2	9.52
	Inadequate	1	4.76
	N/A	18	85.72
	Total	21	100
Page turners	Adequate	3	14.29
	Inadequate	4	19.05
	N/A	14	66.66
	Total	21	100

The students with special needs were also approached to respond to the provision of assistive devices. They had the following to say:

Table 4. 17 Students responses on Provision of assistive devices

Facility	Availability	Frequency	Percentage
Speech aids	YES	4	19.05
	NO	17	80.95
	Total	21	100
Cut out desks	YES	0	0
	NO	21	100
	Total	21	100
Page turner	YES	0	0
	<u>NO</u>	21	100
	Total	21	100
Pen holder	YES	0	0
	<u>NO</u>	21	100
	Total	21	100

Braille	YES	0	0
	<u>NO</u>	21	100
	Total	21	100
White cane	YES	0	0
	<u>NO</u>	21	100
	Total	21	100
Wheel chairs	YES	0	0
	<u>NO</u>	21	100
	Total	21	100
Radio	YES	2	9.52
	<u>NO</u>	19	90.48
	Total	21	100
Large prints	YES	0	0
	NO	21	100
	Total	21	100
Visual aids	YES	0	0
	NO	21	100
	Total	21	100
Hearing aids	YES	3	14.29
	NO	18	85.74
	Total	21	100
Video	YES	4	19.05
	NO	17	80.95
	Total	21	100
Special computers	YES	5	23.81
	NO	16	76.19
	Total	21	100
Texts books	YES	4	19.05
	NO	17	80.95
	Total	21	100
Charts	YES	1	4.76
	NO	20	95.24
	Total	21	100

As per the responses from the learners with disabilities, the college of humanities and social sciences lacked assistive devices.

From the list above, none of the items had more than 30 percent of their provisions. This could mean that the management had not provided for teaching and learning materials to assist learners with special needs. This could mean integration of such learners would be a hard task. Such an influence could impact negatively on inclusive education provision entirely. As from the study by Asmar (2015)

Very little integration can be achieved without such devices.

The researcher also made his own observation as pertaining provision of assistive devices or teaching/ learning facilities.

Table 4. 18 Researcher’s observation on teaching/learning facilities

Facility	Availability	Frequency	Percentage
Hearing aids	Available	0	0
	<u>Not available</u>	7	100
	Total	7	100
Walker/crutches	Available	0	0
	<u>Not available</u>	7	100
	Total	7	100
Braille	Available	0	0
	<u>Not available</u>	7	100
	Total	7	100
Sign language books	Available	0	0
	<u>Not available</u>	7	100
	Total	7	100

Magnified glasses	Available	0	0
	<u>Not available</u>	7	100
	Total	7	100
Speech aids	Availability	0	0
	<u>Not available</u>	7	100
	Total	7	100
Visual aids	Availability	0	0
	<u>Not available</u>	7	100
	Total	7	100
Modified pencil	Availability	0	0
	<u>Not available</u>	7	100
	Total	7	100
Page turners	Availability	0	0
	<u>Not available</u>	7	100
	Total	7	100
Head pointers	Availability	0	0
	<u>Not available</u>	7	100
	Total	7	100

As per the observation schedule of the researcher, it was observed that the college had 100 percent lack of the assistive devices (teaching and learning facilities). These included; hearing aids, walker/crutches, braille, sign-language books, magnified glasses, speech aids, visual aids, modified pencil, page turner, and head pointers.

From the data stated above, it is clear that the University of Nairobi has minimal numbers of assistive devices. This includes those that range from those to help enhance mobility, visual loss, hearing impairment and so on. This could hamper in accessing information and places with much ease. With the absence of such assistive devices as enlisted above, it makes integrating learners with special needs a tricky venture, especially in an institution of higher

learning.

4.6.2 Analysis of the data from the general view

Table 4. 19 Administrators' responses on the adequacy of assistive devices

Assistive devices	Adequate (%)	Inadequate (%)
	18.6815	81.3185

As per the t- test analysis the 21 observations revealed a mean of 2.4286 of the administrators who said that assistive devices were adequate and a mean of 10.5714 of those who stated that the assistive devices were not adequate. That is:

Ho: There was no significant difference in the means.

H₁: There was a significant difference in the means.

$P(T \leq t)$ one tail= 1.7861E-05. Since $1.7861E-05 < 0.05$, accept the null hypothesis, hence there is no significant difference in between the means. With such a difference in mean, it means the adequacy of assistive devices influences the integration of learners with special needs.

Table 4. 20 Students' responses on adequacy of assistive devices

Assistive devices	Adequate (%)	Inadequate (%)
	15.238	84.762

As per the t- test analysis, the 21 observations revealed a mean of 1.5238 of the students who said that assistive devices were adequate and a mean of 8.4762 of those who said that the assistive devices were not adequate. That is:

Ho: There was no significant difference in the means.

Hi: There was a significant difference in the means

$P(T \leq t)$ one tail= 4.75197E-08. Since $4.75197E-08 < 0.05$, accept the null hypothesis, hence there is no significant difference between the means. With such a difference in means, it means the adequacy of assistive devices influences the integration of Learners with Disabilities.

4.7 Influence of human resources in integration of learners with special needs.

4.7.1 Analysis of the data from the specific view

The researcher sought to answer the question how adequacy of human resources influence integration of learners with special needs into college life at the college of humanities and social sciences of the University of Nairobi. To start with LWD at the faculty of Arts, school of Law and school of business were asked to respond as to whether they had benefited from services offered by specified human resource persons. This is what they had to say.

Table 4. 21 Students' responses on whether we have the following human resources to give them support services.

		Frequency	Percentage
Special Education Lecturers	YES	0	0
	NO	21	100
	TOTAL	21	100
Physiotherapists	YES	0	0
	NO	21	100
	TOTAL	21	100
Psychologists	YES	5	23.81
	NO	6	76.19
	TOTAL	21	100
Speech therapist	YES	1	4.76
	NO	20	95.24
	TOTAL	21	100
Occupational	YES	2	9.52
	NO	19	90.48
	TOTAL	21	100
Learning specialist	YES	3	14.29
	NO	18	85.71
	TOTAL	21	100

The findings of the students with disabilities above clearly show that the number of human resources is dismal. Of the persons listed to assist integration, none of them had a frequency of more than 30 percent in their availability. As observed by Melanie (2015), there was still lack of manpower and expertise to achieve full inclusion. With such small numbers in the college of humanity and social sciences, integration won't take off as expected. This could be a key reason as to why enrolment numbers of L.W.D are low in such an old class university.

The researcher also sought the responses of the college administrators on the adequacy of the human resources handling LWD. This is what was discovered.

Table 4. 22 Administrators' response on adequacy of human resources for SNE

Facility	Availability	Frequency	Percentage
Brailleists	Adequate	6	28.57
	Inadequate	2	9.52
	N/A	13	61.91
	Total	21	100
Psychologists	Adequate	10	47.62
	Inadequate	0	0
	N/A	11	52.38
	Total	21	100
Learning specialists	Adequate	6	28.57
	Inadequate	0	0
	N/A	15	71.43
	Total	21	100
Sign language interpreter	Adequate	6	28.57
	Inadequate	2	9.52
	N/A	13	61.91
	Total	21	100
Physiotherapists	Adequate	6	28.57
	Inadequate	1	4.76
	N/A	14	66.67
	Total	21	100
Special Education Lecturers	Adequate	6	28.57
	Inadequate	0	0
	N/A	15	71.43
	Total	21	100

The administrators are in agreement with students that the numbers of human resources to help deal with learners with special needs were not sufficient at all. Most of them reported that the human resources were few if any. This negates the efforts of integration since as key mentors

of such learners, their absence definitely deals a major blow to integration of learners with special needs.

A study done by Melanie (2015) states that though we have trained staff to help deal with LWD, there is still lack of manpower and expertise to achieve full inclusion. As per the statistics shown above, the University of Nairobi is too much behind in matters inclusion. Comparing the number of the LWD and the dismal percentages of the human resources available, it only leaves for one to wonder whether this college is ready for inclusion as pertains the global campaigns in EFA, UNESCO and UNCRPD.

4.7.2 Analysis of the data from the general view

Table 4. 23 Administrators' responses on adequacy of human resources

Adequacy of human resources	Adequate (%)	Inadequate (%)
	34.1267	65.8733

As per a single factor ANOVA, the 21 observation revealed a mean of 2.0476 of administrators who stated that human resources was adequate, while 3.9524 mean was of those who stated that human resources was not adequate. That is:

$$H_0: \mu_1 = \mu_2$$

$$H_1: \mu_1 \neq \mu_2$$

H_0 : There was no significant difference in the mean

H_1 : There was a significant difference.

F tabulate= 3.1504, F calculated= 27.913. Since F calculated > F tabulated, i.e. 27.913 > 3.1504, we reject the null hypothesis, hence the mean difference had a significant effect on the integration of learners with special needs.

Table 4. 24 Students' Responses on adequacy of human resources

Adequacy of human resources	Adequate (%)	Inadequate (%)
	19.0433	80.9567

As per a single factor ANOVA, the 21 observations revealed a mean of 1.1426 of students who stated that human resources was adequate while 5.8571 of the mean showed that human resources was not adequate. That is:

$$H_0: \mu_1 = \mu_2$$

$$H_1: \mu_1 \neq \mu_2$$

H_0 : There was no significant difference in the mean

H_1 : There was significant difference in the mean.

F tabulates= 3.150411, F calculated= 33.6124 with 62 total degrees of freedom. Since F calculated > F tabulated i.e. 33.6124 > 3.150411, we reject the null hypothesis, hence the mean differences had a significant effect on the integration of learners with special needs.

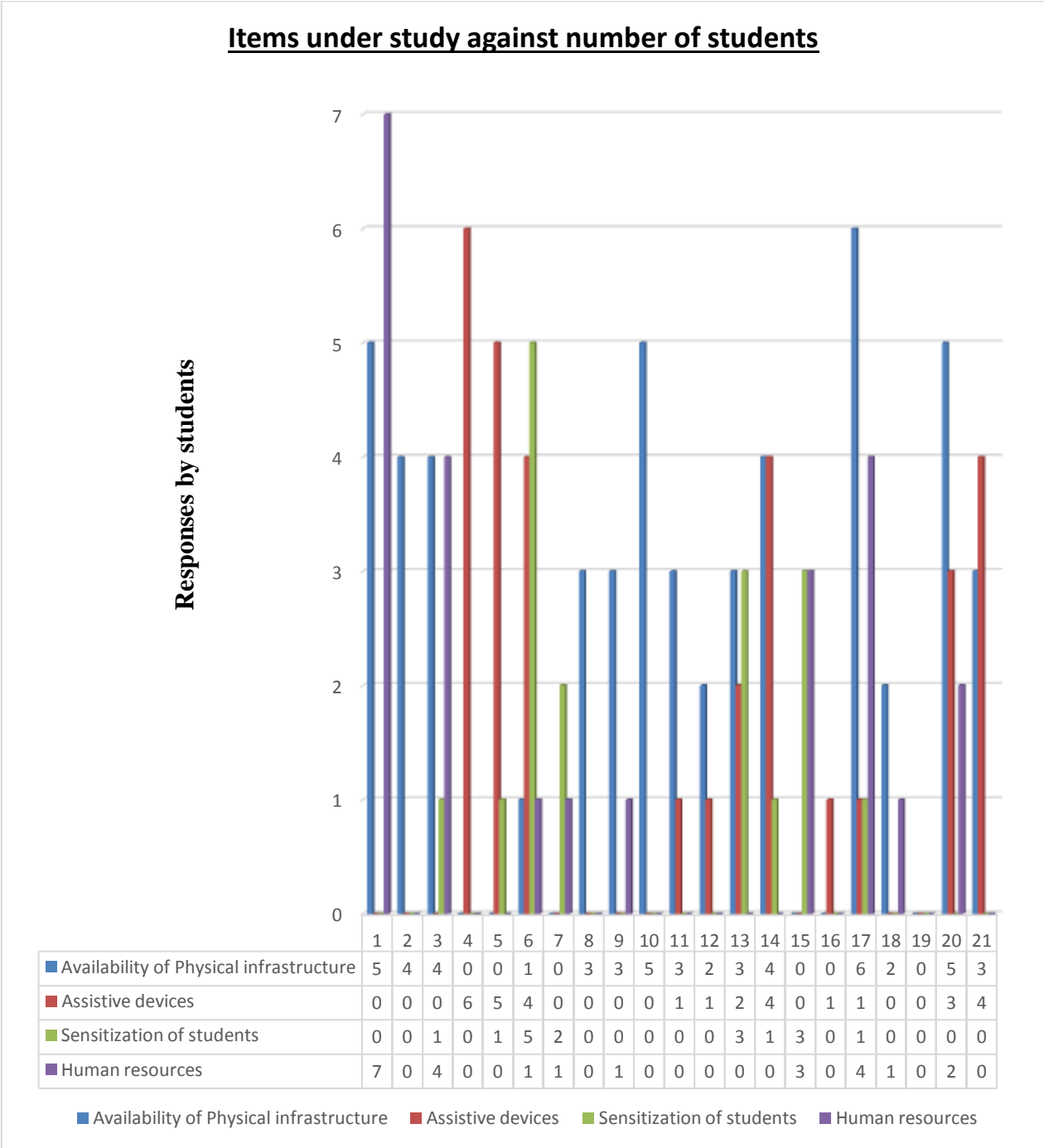


Figure 4. 4 Graphs showing a summary of the analysis for students

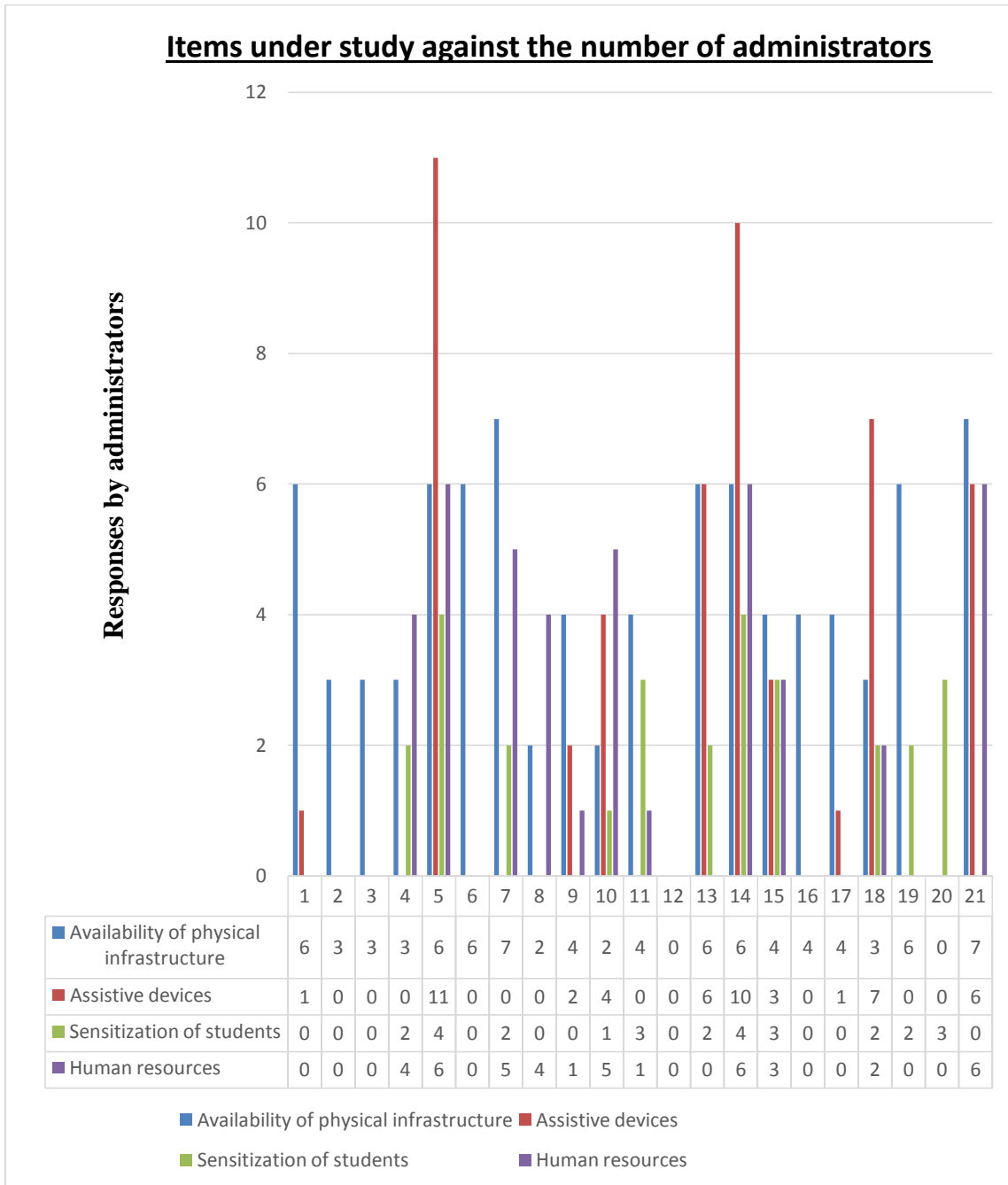


Figure 4. 5 Graphs showing a summary of the analysis for administrators

The graphs show the responses from the field in relation to the dependent variables under study. These are availabilities of physical infrastructure, provision of assistive devices, and sensitization of students and adequacy of human resources. The two graphs for students with special needs and the administrators have one thing in common, that we have minimal provisions of the above to necessitate full integration. The same is too much pronounced in the students' columns. As the major targets of this study, their sentiments could be relied upon. Most administrators could show that all was somehow fine. On the vertical column, a number could reach the 6th target. As policy makers or implementers of policy by authority, some would have just wanted to play smart. This could diffuse the expected anxiety caused (if truth was told) which as others might have anticipated, could have led to victimization by high level management. This is a bit unfortunate since such studies are meant to establish gaps so that solutions are found to make systems work well for the betterment of humanity.

4.8 Recommendations to help improve the implementation of inclusive education in Kenyan public universities.

Respondents proposed various strategies to be employed to enhance access to university education for LWD in Kenyan public universities. These included: Formulation of inclusion policies by CUE and Government, equipping university colleges with disability accommodative features touching on infrastructure and assistive devices; and training more special education lecturers and other human resource persons to assist in support services like braillists, sign language interpreters, physiotherapists and psychologists. In addition, the respondents suggested a deliberate awareness and sensitization program by the University management targeting staff and students on the rights of LWD as this would be a means of

dealing with stigma.

Others even recommended that each University was to have an autonomous department that specifically runs the affairs of LWD. This could help address issues related to modification of college infrastructure to accommodate students with disability and provision of assistive devices and materials to majority of public universities to aid in teaching of LWD.

Other studies reported similar strategies. For instance Omare (2013) in the paper; Enhancing access to secondary education for learners with disabilities in Kisii District of Kisii County, Kenya. Others include Kibias (2015) on school based factors influencing performance of children with disabilities in public primary schools in Kajiado North District, Kajiado County, Kenya.

It was prudent to also note that, majority of the respondents observed that such strategies mentioned could automatically tackle the challenges facing implementation of inclusive education in University Colleges. This is to say, challenges related to infrastructure, assistive devices, human resources, and sensitization of both staff and students could come to rest.

The only notable challenges that required internal and external interventions was that touching on funding. Minimal reforms could be achieved without financial resources. Those responsible for funding universities from internal sources, and external ones (like Government and donors) should be sensitive and prompt and include LWD related parameters when channeling such resources. This is to say, making a college environment disability friendly requires a lot of financial input. Despite this, UNESCO (2005) recommended special items to help challenged learners cope with hurdles in learning at all levels.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary, conclusions, recommendations and suggestions for further research.

5.2 Summary of the study

The purpose of this study was to investigate institutional factors influencing university management in integrating learners with special needs into college life in the University of Nairobi. The research objectives were: To determine the extent to which availability of physical infrastructure influences integration of learners with special needs into college life at the college of humanities and social sciences, University of Nairobi; to assess the extent to which students' sensitization influences integration of learners with special needs into college life at the college of humanities and social sciences, University of Nairobi; to determine the influence of provision of assistive devices on integration of learners with special needs into college life at the college of humanities and social sciences, University of Nairobi and to assess the extent to which adequacy of human resources influences integration of learners with special needs into college life at the college of humanities and social sciences, University of Nairobi, Kenya.

The study used descriptive survey design. The target respondents consisted of 15 administrators and 30 students with disabilities. The researcher used purposive sampling procedure to select 21 administrators and 21 students with disabilities. Data was collected

using questionnaires and a researcher's observation schedule. The findings, analysis and interpretation of the data were summarized in chapter four. The respondents of the study were administrators and LWD in the college of humanities and social sciences of the University of Nairobi. This formed 3 campuses, thus, main campus(faculty of Arts), Parklands (School of Law) and Lower Kabete (School of business). The administrators included those in charge of construction and maintenance, dean of students, the in charge of library services, those concerned with medical services, those managing students' welfare association, deans of faculties and their registrars, and the team managing transport services. The questionnaire return rates were 70 percent for students with disabilities and 100 percent for administrators.

All the administrators having submitted back their questionnaire was considered satisfactory for the study.

5.3 Discussion of findings

The findings of the study showed that most physical facilities in the university campuses under study were not available and adequate to accommodate LWD. For instance, many classes, hostels and other buildings lacked ramps at the entrances of the building. The worst scenario was in the school of business whereby none of the hostels has a ramp at the entrance. This could make LWD using wheel chairs to be in trouble when moving in and out.

The desks, book shelves in the libraries and toilets were not adapted for easy use and access by learners with physical challenges. Those available were designed for use by the normal or unchallenged learners. The library administrators could assist in helping learners with physical challenges access books as libraries had several floors. Out of 3 campuses studied, only one

had a special toilet in the library.

Accessibility for the physically and visually challenged proved tricky since most buildings at the University of Nairobi had several floors. This includes libraries, Administrative blocks, lecture halls and even hostels. Of the 3 campuses observed, only one had a few elevators. The other two, despite having several floors, had none. We only had stairs some which looked steep and narrow. With each of these campuses having visually impaired and physically challenged learners, their stay had proved an uphill task. Some expressed high levels of trauma since they felt discriminated and neglected by the University management.

Another major finding of the study was that students sensitization was not a priority by the management. As per the responses, LWD were not given awareness on emotional support, academic support, social support, co- curricular support and even sensitivity to others. It was discovered that the counseling that was done was a general one during orientation at admission. This included all students (even the unchallenged ones). To have been singled out and been sensitized in the above areas as a special group was not a priority of those in charge. This has made most of them emotionally disable and social misfits. This has affected them academically to a level of some taking longer than expected to finish their courses in campuses.

With lack of play grounds and equipments for them, they could feel completely detached from the rest. One campus (school of law) did not have a field for games. When the unchallenged were ferried to sister campuses to play, the LWD are left to languish on their own. Such acts had made them lose sensitivity to others.

The findings of the study also revealed that the University management had not provided sufficient assistive devices in integrating learners with special needs. The textbooks available in the 3 colleges were designed and printed for use by the ordinary learners. LWD with low visions had a big issue using text books since they needed those with large prints. This lowered their rate of reading and could not compete favorably with their peers who did not have such challenges. In nearly all the campuses, braille and braille machines, hearing aids, speech aids, visual aids, head pointers, pen holders, page turners and special computers with screen readers were not available. Lack of such assistive devices should have been the cause why the University of Nairobi was experiencing low numbers in enrolments of LWD.

A final finding of the study revealed that human resources to help support LWD was not adequate. This meant that there were no braillists, physiotherapists, special education lecturers and learning specialists. Without laptops and screen readers for the visually impaired, there was need for them to use braille machines. Without braillists nobody was present to do the work of a transcriber that is to help translate the braille text in the normal text to be read. This proved technical during exams for some. There were physical challenges that required medical interventions. Services of physiotherapists were required. The researcher discovered that the medical department of the university had partnered with Kenyatta National Hospital to have all cases that required say therapy to be referred there for further action.

Special education lecturers were not adequate. This made it hard for the ordinary lecturers to be sensitive to the needs of LWD. A case was told to the researcher of when a lecturer could use slides in teaching for a record 3 hours in a class where a number of students were visually

impaired. Without adequate numbers of human resources to help mentor LWD, the university has had low numbers of LWD since those present only rely on peers and well wishers to have them manage their stay.

The study revealed recommendations of the respondents on what is to be done to help improve the implementation of inclusive education in Kenyan public universities. One of the strategy was to have C.U.E formulate policies of inclusion. Such policies should link up with sensitization, infrastructure, human resources and assistive devices for LWD. The above areas to be addressed fully to make the university environment habitable for LWD. The respondents also stated that there was to be a deliberate move by the universities to equip their colleges with disability accommodative features related to infrastructure and assistive devices. The same universities were to train more human resources to assist in support services for LWD. As a key recommendation, universities were to embark on awareness and sensitization programs targeting both staff and students on the rights of LWD. This could make integration of LWD easy enough.

To crown it all, the respondents proposed that a special department to be formed to help deal with disability cases in the universities. It was observed that as by then, such a department in the University of Nairobi was under the dean of students, which made it semi- autonomous. This is to mean, the office of the dean of students has so many other matters to attend to. Given that issues touching on LWD could require some urgency, an autonomous department could help address such predicaments of LWD.

When asked to list some challenges faced in implementation of inclusive university colleges under study, the administrators had the following to say:

- i. Lack of funds
- ii. Inadequate infrastructure
- iii. Inadequate human resources/staff
- iv. Lack of awareness on issues of inclusion.
- v. Lack of assistive devices for LWD.

5.4 Conclusions

The study attained its objectives of investigating institutional factors influencing university management in integrating learners with special needs into college life in the University of Nairobi. These factors included availability of physical facilities, student sensitization, provision of assistive devices and adequacy of human resources.

The first research objective was to determine the extent to which availability of physical infrastructure influences integration of learners with special needs into college life at the college of humanities and social sciences, University of Nairobi. The study revealed that most physical facilities in the University campuses under study were not available and adequate to accommodate LWD. The college environment was not barrier free hence inhibited free movement within the compound and into and out of buildings.

The second objectives were to assess the extent to which students sensitization influences integration of learners with special needs into college life at the college of humanities and social sciences, University of Nairobi. It was revealed by the study that very minimal or even no sensitization had been done to help LWD cope with university life easily . This had made most of LWD too vulnerable in dealing with emotional, academic, social, and even interpersonal issues- at college. This had greatly affected their stay on campus.

The third objective was to determine the influences of provision of assistive devices on integration of learners with special needs into college life at the college of humanities and social sciences, University of Nairobi. The study revealed that the university management had not provided sufficient assistive devices in integrating LWD.

This has led to LWD struggling in trying to cope with their counterparts who are not challenged. Such demeans the spirit of integration.

The last objective was to assess the extent to which adequacy of human resources influences integration of learners with special needs into college life at the college of humanities and social sciences, University of Nairobi. The study revealed that human resources to help support LWD were not adequate. Part of this has reduced enrolment of LWD since those already admitted rely on peers and well wishers to have them manage their stay in college.

5.5 Recommendations

In the light of the findings, these recommendations were made:

- i. The University of Nairobi should consider increasing the provision of teaching and learning resources in its constituent colleges to ensure LWD are adequately catered for. An autonomous LWD department can come up with an equipment scheme for individualized materials according to diversity of learners needs. This will help in the provision of functional teaching and learning in the entire university.
- ii. The University of Nairobi's management should consider restructuring physical environment in its campuses aiming at making them barriers free and disability friendly. The university in liaison with the department of construction and maintenance can make sure that adaptive toilets, ramps, elevators, wide corridors, doors, adapted bathrooms, rails along walls and spacious classrooms that are well lit are put in place. This can be done on new buildings and even modifications being done on old ones.
- iii. The University Council of the University of Nairobi should recruit more lecturers qualified in special education to help in integration of LWD. Deliberate training, seminars, workshops and symposia to be organized to offer professional development to all lecturers across all faculties in special education and general inclusion. This could help improve handling skills instructional methodologies and competencies in providing supportive devices to meet needs of all learners. The council could recruit other human resources like braillists, sign language interpreters, physiotherapists and others to boost integration of LWD.

- iv. In the spirit of public and private partnership, the University of Nairobi can link up with charitable organizations that can assist in supplying it with some devices of LWD. Such organization like the Red cross, Ford foundation, Manu Chandaria foundation, Safaricom foundation and donors could assist. They could supply items like wheel chairs, white canes, hearing aids, visual aids, walker/crutches, brailles and feedback mirrors. Some can even volunteer to install elevators in so many buildings of the University that has hampered mobility to many LWD especially, the physically challenged.
- v. As part of the university curriculum, special education to be a compulsory unit in all the faculties across the University of Nairobi. This will assist in sensitization across every domain. Given that every humanity is a candidate of disability, such a unit can erase stigma of the affected and promote positive co-existence with all.
- vi. The University of Nairobi should implement recently approved SNE policy guidelines. Across the university there are gaps on pertinent issues simply because the university management has not implemented the latest policy guidelines. This can be established from reports of inspection by the ISO groups and Commission for university education.

5.6 Suggestions for further research

The following are some of the areas that could be considered for further research.

- i. Institutional factors influencing implementation of inclusive education in private universities.
- ii. A similar study to be done in several public universities in Kenya.
- iii. Institutional factors influencing integration of learners with physical disabilities in Kenyan public universities.
- iv. Institutional factors influencing integration of learners with visual impairments in public universities in Kenya.

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APPENDICES

APPENDIX I: LETTER OF INTRODUCTION

University of Nairobi

Department of Educational

Administration and Planning

P.O Box 30197- 00100

Nairobi.

Date 28/4/2019

To The Principal

.....

Dear Sir/Madam,

My name is Wasike Eliud Simiyu, a post-graduate student at the University of Nairobi. I am conducting a research on the **Institutional factors influencing university managements' integrating of learners with special needs into college life in the University of Nairobi.** My concern is on the administrators, some lecturers and some students with special needs at the college of humanities and social sciences of the University of Nairobi.

It is my early commitment that all information given here will be treated with confidentiality and only be used for research purposes.

Thank you in advance.

Yours Faithfully,

Wasike Eliud Simiyu

APPENDIX II: OBSERVATION CHECKLIST FOR PHYSICAL FACILITIES

The following are areas to be observed on the ground.

Physical facility	Available	Not Available	In working condition	Not in working condition.
• Adapted toilets				
• Ramps on the door ways				
• Wide corridors				
• Wide doors				
• Rails along the walls				
• Elevators				
• Lit classrooms				
• Spacious classrooms for ease of movement				
• Feedback mirrors				
• Hearing aids				
• Walker/ Crutches				
• Wheel chairs				
• Leveled playgrounds				
• Modified games equipment				
• Cut-out desks				

• Braille				
• Sign language books				
• Magnifying glasses				
• Walker/ crutches				
• Adapted bathrooms				
• Hostels disability friendly				
• Speech aids				
• Visual aids e.g. enlarging lenses				
• White canes				
• Modified pencil				
• Page turners				
• Head pointers				

APPENDIX III: QUESTIONNAIRE FOR ADMINISTRATORS.

1. What is the enrolment of learners with disabilities in your college?

2. Comment on the suitability of available teaching/ learning resources to cater for learners with special needs in your university.

T/Lresources	Adequate	Inadequate	Not Available
a. Textbooks			
b. Braille			
c. Hearing aids			
d. Speech aids			
e. Visual aids e.g. enlarging lenses			
f. Large prints			
g. TV			
h. Radio.			
i. Video.			
j. Head pointers			
k. Pen holders			
l. Special computers			
m. Page turners			

3. Are the infrastructural facilities in your University College adequate and suitable in integrating learners with special needs?

Physical facilities	Adequate	Inadequate	N/A
i. Special toilets			
ii. Ramps			
iii. Spacious rooms			
iv. Wide corridors			
v. Elevators			
vi. Lit- rooms			
vii. Leveled playgrounds			

4. Have you been trained or not in the following areas:

Skilled training area	Trained	Not trained
i. Training in inclusive education		
ii. Sign language training		
iii. Braille training		
iv. Guidance and counseling training		
v. Learning disabilities training		

5. Are there support services for the implementation of inclusive education in your university college?

Support service provider	Adequate	Inadequate	N/A
i. Braillists			
ii. Psychologists			
iii. Learning specialists			
iv. Sign language interpreters			
v. Physiotherapists			
vi. Special education lecturers			

6. What would you recommend to be done to improve the implementation of inclusive education in public universities in Kenya for the:

i. Physical impaired learners

.....

ii. Visually impaired learners

.....

iii. Hearing impaired learners

.....

7. List some challenges faced in implementation of inclusive education in your University College.

- i.
- ii.
- iii.
- iv.
- v.

APPENDIX V: QUESTIONNAIRE FOR STUDENTS

Kindly provide responses to these questions as precisely as possible.

Please do not write your name or that of your college anywhere on this questionnaire.

Please tick (✓) where appropriate or fill in the required information in the spaces provided.

1. What is your gender? [] male [] female

2. What is your age? (years)

3. Which form of special need do you have?

[] Physical impairment. [] Hearing. [] Talking. [] Seeing. [] Others.

Please specify.....

4. Did you undergo induction to make your orientation easy to cope with university life in these areas.

Areas	YES	NO
i. Emotional support	[]	[]
ii. Academic support	[]	[]
iii. Social support	[]	[]
iv. Co- curricular support	[]	[]
v. Sensitivity to others	[]	[]

5. Do you have special desks in your class?

[] Yes. [] No.

6. Do you have special toilets for persons with physical difficulties in your college?

[] Yes. [] No.

7. Do you have a playground suited for learners with special needs in your college?

Yes. No.

8. Do you have the following teaching and learning assistive resources?

T/L Resources	YES	NO
Textbooks	<input type="checkbox"/>	<input type="checkbox"/>
Charts	<input type="checkbox"/>	<input type="checkbox"/>
TV/ Radio/ Video	<input type="checkbox"/>	<input type="checkbox"/>
Speech aid	<input type="checkbox"/>	<input type="checkbox"/>
Hearing aid	<input type="checkbox"/>	<input type="checkbox"/>
Braille	<input type="checkbox"/>	<input type="checkbox"/>
Special computers	<input type="checkbox"/>	<input type="checkbox"/>

9. In your opinion, is your college well suited to allow students with the following disabilities to learn there freely?

	YES	NO
➤ Visually impaired	<input type="checkbox"/>	<input type="checkbox"/>
➤ Hearing impaired	<input type="checkbox"/>	<input type="checkbox"/>
➤ Physically impaired	<input type="checkbox"/>	<input type="checkbox"/>

10. Please tick (✓) features present in your college that you think enable special needs learners to comfortably learn in your college.

- i. Accessible rooms e.g. with ramps and elevators.
- ii. Specially designed furniture e.g. lockers.
- iii. Assistive devices e.g. Braille, white canes and wheelchairs.

- iv. Special Education Lecturers.
- v. Support staff e.g.
 - a) Physiotherapists.
 - b) Psychologist.
 - c) Speech and language therapists.
 - d) Occupational therapists.
 - e) Learning specialists.
- vi. Any other (specify)

.....

.....

11. In your opinion, what do you think should be done to ensure that students with disabilities are enrolled in universities?.....

.....

.....

12. Please indicate whether the University supports the following groups of students in their day to day life at the institution.

I. Physically challenged	YES	NO
• Spacious rooms		
• Special toilets		
• Ramps		

• Elevators		
• Levelled playgrounds		
• Cut-out-desks		
• Page turner		
• Wide doors		
• Pen holders		
II. Visually impaired		
• Lit classrooms		
• Marked paths		
• White cane		
• Radio		
• Large prints		
• Elevators		
• Visual aids e.g. enlarging lenses		
• Braille		
III. Hearing impaired		
• Sign language		
• Interpreters		
• Hearing aids		
• Video.		

APPENDIX VI: RESEARCH PERMIT

THIS IS TO CERTIFY THAT:
MR. ELIUD SIMIYU WASIKE
of UNIVERSITY OF NAIROBI, 0-100
NAIROBI, has been permitted to conduct
research in Nairobi County


Permit No : NACOSTI/P/19/91360/31125
Date Of Issue : 26th June,2019
Fee Recieved :Ksh 1000

on the topic: INSTITUTIONAL FACTORS
INFLUENCING UNIVERSITY
MANAGEMENT'S INTEGRATION OF
LEARNERS WITH SPECIAL NEEDS IN THE
UNIVERSITY OF NAIROBI, KENYA.

for the period ending:
24th June,2020

[Handwritten Signature]
Applicant's
Signature

[Handwritten Signature]
Director General
National Commission for Science,
Technology & Innovation




THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014.


CONDITIONS

1. The License is valid for the proposed research, location and specified period.
2. The License and any rights thereunder are non-transferable.
3. The Licensee shall inform the County Governor before commencement of the research.
4. Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
5. The License does not give authority to transfer research materials.
6. NACOSTI may monitor and evaluate the licensed research project.
7. The Licensee shall submit one hard copy and upload a soft copy of their final report within one year of completion of the research.
8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice.

National Commission for Science, Technology and Innovation
 P.O. Box 30623 - 00100, Nairobi, Kenya
 TEL: 020 400 7000, 0713 788787, 0735 404245
 Email: dg@nacosti.go.ke, registry@nacosti.go.ke
 Website: www.nacosti.go.ke



REPUBLIC OF KENYA



National Commission for Science, Technology and Innovation

RESEARCH LICENSE

Serial No.A 25534

CONDITIONS: see back page

APPENDIX VII: RESEARCH AUTHORIZATION



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,
2241349,3310571,2219420
Fax: +254-20-318245,318249
Email: dg@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Wanyuki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/19/91360/31125**

Date: **26th June, 2019.**

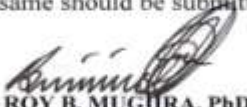
Eliud Simiyu Wasike
University of Nairobi
P.O Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*Institutional factors influencing university management's integration of learners with special needs in the University of Nairobi, Kenya.*" I am pleased to inform you that you have been authorized to undertake research in **Nairobi County** for the period ending **24th June, 2020.**

You are advised to report to **the County Commissioner, and the County Director of Education, Nairobi County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a **copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.


DR. ROY B. MUGHIRA, PhD.
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Nairobi County.

The County Director of Education
Nairobi County.