

**IMPLEMENTATION OF INCLUSIVE EDUCATION IN KENYATTA
UNIVERSITY, KENYA**

BY

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**A THESIS SUBMITTED TO THE DEPARTMENT OF EDUCATIONAL
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DECLARATION

This thesis is my original work and has not been presented for a degree in any other University.

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DEDICATION

I dedicate this work to my wonderful and loving wife Liz Muthoni and son Courtney their moral support and to Almighty God who gave me strength to complete this work.

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ABBREVIATIONS AND ACRONYMS

H.I	:	Hearing Impaired
ISESCO	:	Islamic Organization for Education Science and Culture.
K.U.D.S.A	:	Kenyatta University Disabled Students Association
P.H	:	Physically Handicapped
S. S. N	:	Students with Special Needs
UDHR	:	Universal Declaration of Human Rights
UN	:	United Nations
UNESCO	:	United Nations Educational, Scientific and Cultural Organization
UNICEF	:	United Nations Children’s Fund
V. I	:	Visually Impaired

ABSTRACT

Inclusive education has become a major point of focus in higher institution of learning. Despite increasing in demand and need of education by the Students with Special Needs (SSN) and the strategies implemented by Universities, there continues to be a sense of neglect, lack of knowledge and resources as essential components for the implementation of inclusive education. This study investigated the implementation of inclusive education in Kenyatta University (KU), Nairobi, Kenya. The specific objectives of the study were to: To identify the resources available/ unavailable/ and their adequacy to students with special needs that are required to facilitate implementation of inclusive education, to determine the teaching/learning methodology for training students with special needs in Kenyatta University, to determine the accessibility of university facilities, transport facilities and suitability of accommodation services and to determine the attitude of Students with Special Needs (SSN) in Kenyatta University towards inclusive education. The study was informed by Albert Bandura's (1977) Social learning theory and Inclusion within the whole social context. The study employed a descriptive case study design which is used in studying social systems such as a school. The study population sample size constituted sixty nine (69) respondents who filled questionnaire and one respondent was interviewed, all from Kenyatta University. An interview was conducted with the Deputy Vice Chancellor Academics. A total of 24 lecturers and 45 Students with Special Needs were given questionnaires to fill. A checklist was also used to identify the physical facilities/resources available. Qualitative and quantitative approaches were used to analyse, present, and interpret data using Statistical Package for Social Science (SPSS). Analysis of data was done thematically using the objectives of the study. The key findings of the study were: Most of the resources/facilities are available but not adequate, the teaching/ learning methods were average which was not very effective to ensure the learning process takes place for the SSN, the accessibility of university facilities, transport services and accommodation in the university were suitable to the students with SSN and students with special needs were comfortable but were stigmatized at least once in the university. Recommendations included: The university management should come up with a strategic policy that will ensure the provision of all resources/facilities, employ more resource room personnel and have different resource rooms to cater for each group of SSN, university management should provide training for the lecturers to improve their knowledge and skills in teaching students with special needs through workshops and seminars and inter-departmental approaches, The university management should have a strategic plan for continuous maintenance and increase of all the physical accessibilities to the facilities, transportation and accommodation and the university management should provide awareness of their students with special needs through seminars/ workshops, creating a university common course on inclusive education and increase programmes on disability sensitization so as to enhance inclusivity for all persons in the university.

CHAPTER ONE

INTRODUCTION

This chapter gives general background information to the study, statement of the problem, purpose and objectives of the study. Other areas covered include research questions, significance of the study, assumptions of the study, scope of the study, theoretical and conceptual framework.

1.1 Background to the Study

1.1.1 Brief history of Kenyatta University

The following information was gathered from the Kenyatta University Calendar, 2006- 2009: Kenyatta University is situated about 23 Km from the city of Nairobi on the Nairobi-Thika dual carriageway covering 1,100 acres of land. The long journey to university status started in 1965 when the British government handed over the Templer Barracks to the Kenyan government. The Barracks was converted into an institution of higher learning known as Kenyatta College. Initially, Kenyatta College was divided into two sections, the Secondary Education Division (SED) and the Teacher Education Division (TED).

The SED had classes from form I to form VI. The Secondary Education Division was phased out in 1969 to give way to seven advanced level science classes which earned the institution high reputation for its excellent performance in the advanced level examination. It became the main supplier of undergraduates in science oriented courses at the University of Nairobi where they performed extremely well. The Teachers Education Division was phased out in 1973.

The first courses offered in the Teachers Education Division in 1965 were the three-year post-ordinary level secondary Teacher's Certificate (SI) and a one-year post-Advanced Secondary Teacher's Certificate (SA).

Following an Act of Parliament of 1970, Kenyatta College became a constituent college of the University of Nairobi. Consequently, the name changed from Kenyatta College to Kenyatta University College. It admitted its first batch of two hundred students in 1972 to pursue studies leading to the award of the Bachelor of Education Degree of the University of Nairobi. Due to these developments, SI and SA Teacher's Certificate courses were phased out by 1975 to give way to the Bachelor of Education Degree programme and a two-year undergraduate Diploma in education programme.

The Diploma programme was implemented to alleviate an acute shortage of science and special subjects (Kiswahili, Music, Fine Art etc.) teachers in the secondary schools. In July, 1978, the Government transferred the Faculty of Education of the University of Nairobi to Kenyatta University College Campus. As a result, the college became the only institution training teachers at both undergraduate and postgraduate levels.

The University status was achieved on August 23rd, 1985, when the Kenyatta University Act received presidential assent making the institution a full-fledged University. The Act became operational on September 1, 1985 and the new university was inaugurated on December 17th, 1985. Kenyatta University immediately started establishing new faculties and constituent colleges. In this pursuit, Jomo Kenyatta

College of Agriculture and Technology (JKUAT) became a constituent college of Kenyatta University in 1988 before becoming a full-fledged university.

Currently, Kenyatta University has the following schools: School of Business, School of Education, School of Environmental Studies and Human Sciences, School of Humanities and Social Sciences, School of Health Sciences, School of Pure and Applied Sciences, the Graduate School, school of economics, school of Law, and school of medicine.

The vision of Kenyatta University is to be a dynamic, an inclusive and a competitive centre of excellence in teaching, learning, research and service to humanity. Also the philosophy of the university states that sensitivity and responsiveness to societal needs and the right of every person to knowledge. This is alluded too by the objectives whereby it creates equal opportunities for those qualified to pursue university education, provide facilities in collaboration with other approved institutions for enhancing access to higher education and to promote the development of all students welfare systems for the attainment of academic excellence and an all-round education.

1.1.2 Historical development of inclusive education

According to United Nation Children's Education Fund (UNICEF, 2003), it is globally estimated that 70% of children with disabilities, including those with mild mental retardation, can attend regular schools provided the environment is designed to be accessible and the institution is willing to accommodate them. UNICEF believes that, the goal is to enable all children to have full participation in the development of

their community which is achievable through inclusive education. To meet this goal, all structures and community-based services are to be accessible to all members of the community without discrimination.

Seamus et al (1990), affirmed it was 40 years after the nations of the world meeting through the Universal Declaration of Human Rights, that everyone has a right to education. They summed up the situation when they stated that those with special needs, who ironically have the greatest need of education are the least likely to receive it. Students with special needs and others who fail to achieve satisfactory progress in school learning are usually excluded from the mainstream education system or receive less favourable treatment within it than other children. This is further supported by Stainback (1996) who reiterated that inclusive schooling is the practice of including everyone irrespective of talent, disability, socioeconomic background, or cultural origin in supportive mainstream schools and classrooms where all students' needs are met. In inclusive schools, the philosophy of caring, honouring and celebrating the diversity is apparent. Cooperation of each individual, principal, lecturer, student or parent is accepted in the community. When The Americans Act for persons with special needs was implemented in 1990, buildings were changed in terms of accessibility. Mace (1997) alluded that universal design was coined by an architect who dreamt that new structures and spaces could be made accessible by design from the beginning.

According to Orkwis and McLane (1998), universal design in learning situation means; the design of instructional material and activities that allow individuals with wide differences in their abilities to see, hear, speak, move, read, write, pay attention,

organize, engage and remember to achieve in the classroom. The challenge of establishing inclusive education is occurring within a context of economic and social change. It is closely linked to civil society's vision of equitable development and eradication of poverty for society's most marginalized groups. World Bank (1988), argues that the goal of eradicating poverty is not possible when society's most vulnerable groups remain marginalized from actively participating in the process of economic change.

Elwan, (1998) explains that, poverty experienced by people with disability is tied to lack of access and opportunities to education and employment. Indeed, low levels of education deny people the opportunity to gain knowledge and skills necessary to integrate in the formal labour market where pay benefits and working conditions are typically more advantageous than informal economic sector. The universal design understands inclusion to mean that people with disability must be provided from the outset with resources and structures they need to be fully contributing members of society. Inclusion generally means changing society to become welcoming to the participation of people with disabilities each according to his or her abilities and interests.

The World Education Forum Meeting in Dakar in 2000, also recognized the rights of children with disabilities to be included in mainstream education. A more recent Arab Regional Conference held in 2001 by United Nation Educational Scientific and Cultural Organization (UNESCO) and the Islamic Organization for Education and Culture (ISESCO) named it 'Education in the formal educational system for students with special needs' which placed an emphasis on the inclusion of students with

special needs in the mainstream educational system. World Bank report (1999) said that chief among these is the commitment of the world community, Kenya included, to providing basic education to all Kenyans. This significant move was clearly expressed by the World Conference on 'Education For All' held in Jomtien, Thailand in 1990.

The 1948 United Declaration of Human Rights (UHDR) on the rights to education of every individual was reaffirmed in UNESCO report of 1994 which came up with Salamanca statement and framework for action on special needs. It further renewed the pledge made by the world community at the 1990 Jomtien conference – to ensure human rights regardless of individual differences. Engelbretch and Booyesen (1999) asserted that an inclusive philosophy is central to the educational policies of large developed and developing countries and has emerged as an important aspect of international discussion, about how best to respond to learners who experience difficulties in schools/institutions like Kenyatta University. In recent years, there has been a significant development internationally in the education of learners with special needs. The transformation of integration movement into inclusion movement is a shift of emphasis in an attempt to overcome some of the perceived limitations of integration. The former term is increasingly seen as referring to a limited attempt to accommodate and support learners with special needs in regular schools.

In this respect, commissions on education which were set up in Kenya since independence came up with varying recommendations on the special needs education. For example, Gachathi Commission (1976) suggested several ways through which special education could be improved and expanded. The report specifically stated the

need of having special needs students with special educational needs to be educated in special schools. The report of the presidential working party on education manpower for the next decade and beyond also known as Kamunge report (1988) disagreed with the earlier report. They stated that students with special needs in schools had similar goals of education with those students without special needs.

In addition the Government constituted Kenya Institute of Special Education (KISE) which is a semi autonomous government agency of the Ministry of Education, Kenya which was to establish linkages with national and international institutions on inclusive education and also to offer consultancy services in special needs education and related areas.

1.1.3 Importance and current trends of inclusive education

According to UNESCO (1994), inclusion is a growing phenomenon in Africa. Low (1983) affirmed the importance of inclusion as students with special needs can achieve the fullest educational progress and social integration within inclusive settings while separate socialization breeds negative attitudes and prejudice, intolerance and self-denigration.

In Kenya, people with disability not only represent a critical segment of the marginalized population, but also face special problems. As a result of their disabilities, most of them have no access to education, health, employment or rehabilitation services. According to UNESCO (1997) the majority experience hardships as a result of in-built social-cultural and economic prejudices,

stigmatization and more often, ostracism and violation of their fundamental human rights.

According to Karugu (1984), much has been done since independence by voluntary organizations, government and international agencies, such as UNICEF and UNESCO to create awareness among all students in respect of the unique position of people with special needs in the society including Kenyatta University that opened a resource room in 1981, for students with visual impairment who included students with albinism. The physically handicapped students were provided access to all areas of the library through the use of an elevator which would accommodate wheelchairs but students with hearing impairment were to provide their own hearing aids and sign language interpreters.

Government of Kenya (1992), the call for education for all was echoed in light of Jomtien conference recommendations. The government realized there was a great concern to ensure various disadvantaged groups hitherto students with special needs are not denied education by all kinds of factors and are assisted to access education in both basic and tertiary institutions. The major objective was to ensure educational opportunities for the full development of individual talent and ability are availed to all through an open door system so that no Kenyan is denied the chance to learn. Government of Kenya, (1999), stated that the recent development in improving access to educational provisions for learners with special needs is seen in terms of including them in the mainstream education and training. This call for inclusion has attracted increased involvement of governments and interest groups in seeking to improve access to education for majority of those with special needs still unreached. It is from

these foregoing that when these learners complete their basic education can advance to their higher level of education. Inclusion of students with special needs to train with their regular peers in Kenyatta University offered a sufficient proposition to implement inclusive education for students with special needs.

The first recorded case of implementation of inclusion in Kenyatta University was in July 1981, opened by the Honorable Charles Njonjo which was called the Dean of Students' Affairs Disability Service Centre. This was a resource room that provided and maintained Braille equipment and transcription of Braille to print for the lecturers and, print to Braille for the Visually Impaired (VI) and students with albinism who required the services. Physical handicapped students were provided with some level of access to university facilities while the hearing impaired required hearing aids and sign language interpreters.

With increased knowledge of inclusive education it did not only mean a resource room but also adaptations in teaching methodology, access to the lecture halls/accommodation, resources, equipment, attitudes of students with special needs and a collective awareness in the institution. In fact, on 26th February 2010, Kenyatta University inaugurated the first Kenyatta University Disability Day on their calendar and also opened a Disability and Awareness Centre which was a centre of information on disability.

Mwaura, (1999), said that the right to education does not imply inclusion. The right to inclusive education was initially stated in the Salamanca Statement and Framework

for Action in Special education in 1994 which emphasized that the school need to change and adopt the diverse needs of all learners.

According to Commission of Higher Education (2007), lack of proper inclusion plan, resources and teaching methodology remains a greater challenge to the inclusive education. According to UNESCO (1994), with the fundamental goal of the inclusive education movement to protect the rights of students with special needs and to widen access to educational opportunities to them. Hence, Kenyatta University has been admitting students with special needs for more than two decades under this guideline with no study showing how inclusive education has been implemented. Further, there is no evidence in other higher education institutions in Kenya if they have programs for inclusive education e.g. a study by Songe (2004) showed that Kenya polytechnic has no program to accommodate students with special needs.

It is for this reason that a study was carried out to gather information on the current state of the implementation so as to be able to provide the educators and administrators with strategies to plan for the inclusive education of the students with special needs in Kenyatta University.

1.2 Statement of the Problem

Despite increasing demand and need of education by the Students with Special Needs (SSN) and the strategies implemented by Kenyatta University, there continues to be a sense of neglect, lack of knowledge and resources as essential components for the implementation of inclusive education. Kenyatta University Disabled Students Association KUDSA, (2010), revealed that there was an estimated 86 students with special needs in Kenyatta university and admission has been going on for more than

20 years. This included students with visual impairments, hearing impairments, physically handicapped and students with albinism.

Most of the institutions with inclusive education experience lack or inadequate resources/facilities, lack experienced lecturers to teach students with special needs, lack of accessibility to university facilities and poor attitudes of SSN in an inclusive environment.

The study established strategies of implementation of inclusive education and measures to be taken to improve implementation of inclusive education in Kenyatta university.

1.3 Purpose of the Study

The purpose of this study was to investigate the implementation of inclusive education in Kenyatta University and suggest recommendations to enhance inclusive education in the university.

1.4 Objectives of the Study

Objectives of this study included the following:

- (a) To identify the resources available/unavailable and their adequacy for students with special needs that are required to facilitate implementation of inclusive education.
- (b) To determine the teaching/learning methodology for training students with special needs in Kenyatta University.
- (c) To determine the accessibility of university facilities, transport facilities and suitability of accommodation services.

- (d) To determine the attitude of Students with Special Needs (SSN) in Kenyatta University towards inclusive education.

1.5 Research Questions

The study was guided by the following research questions:

- (a) Are the resources/facilities available/adequate to students with special needs in Kenyatta University?
- (b) Do the lecturers understand the teaching/ learning methodologies of students with special needs and do the students find them appropriate?
- (c) How good is the accessibility to the lecture halls, transport facilities and accommodation?
- (d) What are the attitudes of students with special needs in Kenyatta University towards inclusive education?

1.6 Significance of the study

The following are the significance of the study:

- (a) It would increase the knowledge base and strengthen the capacity of the educators and administrators in developing or improving the existing programmes focusing on inclusive education for students with special needs.
- (b) It would serve as an advocacy tool for promoting inclusive education in both public and private universities in Kenya.
- (c) The findings would assist in identifying the proper teaching/learning methodology in training students with disabilities, improving attitudes of students with special needs towards inclusive education, necessary resources, and improve access to the lecture halls/accommodation.

1.7 Limitations of the Study

This study was limited to Kenyatta University Kenya therefore the research was not conducted in any other university for this investigation due to financial constraint. The research was also limited to the groups of students with special needs the university had admitted who include the visually and hearing impaired, physically handicapped and students with albinism.

1.8 Delimitations of the Study

The study focused on implementation of inclusive education in Kenyatta University. It established resources/facilities, teaching/learning methodology, accessibility to university facilities and the attitude of students with special needs towards inclusive education.

The students without special needs were not investigated in this study due to limited time.

1.9 Assumptions of the study

Assumptions of the study were that:

- (a) All respondents were co-operative and provided reliable information.
- (b) Kenyatta University is equipped with all learning/teaching resources/facilities.
- (c) All students with special needs had access to university facilities and accommodation services were suitable.
- (d) All students with special needs had a good attitude towards inclusive education.

1.10 Theoretical Framework

This research was guided by Albert Bandura's social learning theory (1977). It stated:

People learn through observing others' behaviours, attitudes, and outcomes of those behaviours. Most human behaviour is learned observationally through modelling; from observing others, one forms an idea of how new behaviours are performed. Later on, this coded information serves as a guide for action.

This theory assisted the researcher in explaining human behaviour in terms of continuous reciprocal interaction between cognitive, behavioural, and environmental influences. Therefore students learn to appreciate each others strengths, weaknesses and benefits that they can achieve by learning together in one environment. Also this translates to the community of which the school is a unit of the whole social system. This included the students, lecturers, school management, school environment and the community. This theory was further supported by the inclusive movement to explain the need of inclusive education, its organization and interpretation. Furthermore, these theories helped to link the diverse events in the inclusion of students with special needs in Kenyatta University.

Edmunds (1979), stated that the proponents of inclusion theory in education call for a merger of mainstream students and students special needs as a means of forming unified system. Inclusion theory also supports the view that teaching/learning is a social activity. Similarly, the effective schools approach asserted that if some schools are effective, all can be effective. Moreover, Lipsky and Gartner (1997) pointed out that education of students with special needs can be made effective by identifying effective principles and practices through research.

1.11 Conceptual framework

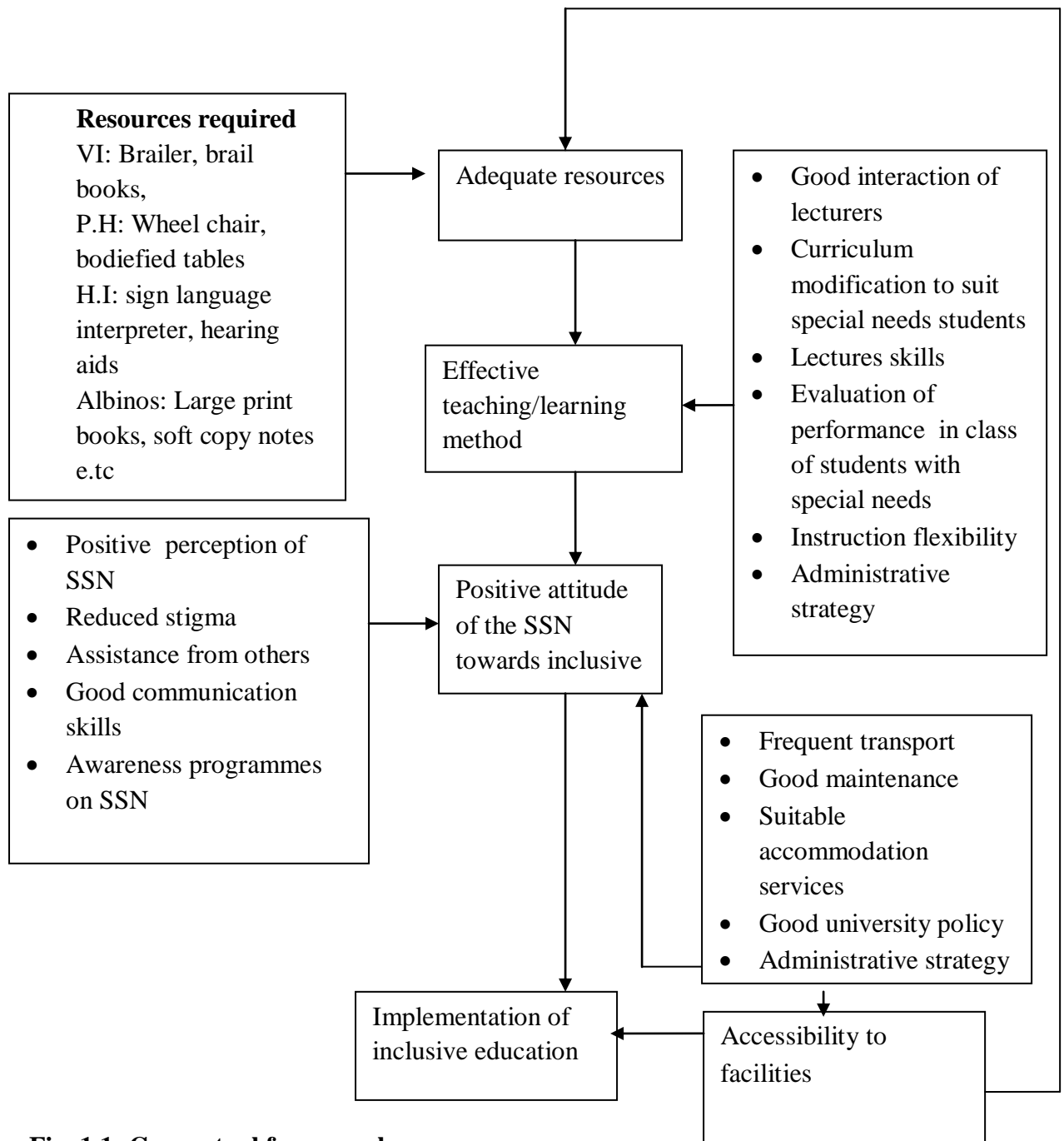


Fig. 1.1: Conceptual framework

Source: Researcher (2012)

From the figure 1.1: provision of the resources required by SSN will lead to effective learning in an inclusive environment. Also good interaction of lectures, lecturer's skills, evaluation of performance and instruction flexibility will led to good teaching/learning method. Other factors such as positive perception of SSN, reduced

stigma, assistance from other students, good communication skills, awareness programmes on SSN will lead to good attitude of SSN towards inclusive education. Thus, adequate resources, good teaching/ learning methods and good attitude of SSN will all lead to a good implemented inclusive education.

Frequent transport, good maintenance and suitable accommodation services will lead to accessibility to university resources/facilities and good attitude of SSN towards inclusive education hence a good implemented inclusive education.

1.11 Definition of Terms

Albinism: Refers to a congenital disorder characterized by the complete or partial absence of pigment in the skin, hair and eyes due to absence or defect of an enzyme involved in the production of melanin. This absence of pigment in the eyes lead to low vision.

Curriculum- Refers to all the selected, organized, integrative, evaluative and innovative educational experiences provided to students consciously or unconsciously under the school authority in order to achieve designated learning outcomes.

Disabled person- Refers to a loss or reduction of functional ability of an individual due to impairment: physical, mental or psychological.

Handicap- Alludes to a disadvantage or restriction of activity, which comes about as a result of society's attitude on disability.

Hearing Impairment: Refers to a condition whereby a person has total loss or reduced hearing capacity and usually need hearing aids.

Impairment- Identified as damage to a part of the body either through accidents, diseases, genetic factor or other causes. This leads to weakening of the affected part.

Implementation- It's the process of carrying out an activity so as to achieve expected outcomes.

Inclusion: Refers to a philosophy that participants in any society should aim at achieving maximum potential to ensure that all persons regardless of their disability, mental, economic and physical or any differences are not excluded from any of the society's activities and that the differences are respected.

Inclusive education: The curriculum of educating learners with special needs within regular setting and providing them with all the necessary human and physical resources.

Physically handicapped: Refers to a person who has a loss or reduction in mobility and has to use adaptive equipments like clutches, wheel chairs among others.

Special needs education: Its the education which provides appropriate modifications in curricular, teaching methods, educational resources, medium of communication or the learning environment.

Special schools: Schools that are built and organized to provide educational services to only learners with particular disabilities.

Visually impaired: Refers to limitation imposed by visual loss or reduction on a person's ability to interact with the environment. It also includes persons with total blindness and those with low vision.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews related literature on resource required in implementation of inclusive education, classroom methodology for SSN, accessibility to university facilities, attitudes towards inclusive education, and conclusion of the chapter.

2.2 Resources required in implementation of inclusive education

Johnson et al. (1994), states that the philosophy of inclusion called for the provision of equal opportunities and access to all resources, services and responsibilities to all. Inclusive education works towards the elimination of all physical and invisible difficulties encountered which reduced the access to provision of education to students with special needs in education in the ordinary classroom.

Students with special needs sometimes require specialised resources/facilities when they are learning in an inclusive environment. For example:

V.I will require resources such as brail machines, brail paper, computers with adaptive soft wares, white canes, brail books, tactile diagrams, book reading machines, resource rooms, adaptations in the curriculum and silent reading rooms.

The students with albinism will sometimes require these resources depending on their degree of visual impairments. In addition they require soft copy and large print text.

The students who are physically handicapped might not require any adaptation in terms of curriculum content and teaching instructions because their impairments do not affect their visual and hearing capacities which are mostly used in regular education setting, but this orthopaedic impairment according to Public Law 94-142

severely affects a student's educational performance. Kennedy (1990) states that these are the students who will require aids such as, wheelchairs, prostheses, helmets, book readers, page turners, writing aids, rest equipments, special tables and desks. Apart from this they function well provided that some vital equipment and accommodation are provided. Mostly for this disability is to have a barrier free access which means the buildings must be accessible to those who use wheelchairs, crutches and callipers and also pavements and other physical or structural environment need to be accessible. Langley (1979) states that: "Architectural barriers make students dependent, limit opportunities for experience, and lower self-esteem. Therefore care must be taken to ensure that programme accessibility and building accessibility go hand in hand.

According to Clark (1984), everyone who is learning to understand and use sign language needs a sign language interpreter, hearing aid, resource room, quiet classroom, avoid food in the mouth when talking, rephrasing statements using different words and using a normal speech rate. Even if a student with hearing aids can hear and speak, that student is still deaf. Ndurumo (1993) says that oral method in teaching instructions should be de-emphasized in favour of a combined method of communication. An inclusive method that uses all possible cues simultaneously from the very beginning, that utilizes the deaf person's strengths, his normal intelligence and vision, is the only sound procedure.

In fact Mba (1979) says that studies have shown that hearing impairment students gain greater improvement educationally, psychologically and socially when total communication is used with them. JamieBerke, (2010), states that, lecturers should

use oral/aural techniques and sign language methods. This is the best way of imparting information to the students and reduces challenges in communication between them. Therefore it is very important for the students to follow the curriculum of the institution because they only require more visual teaching methods but the content remains the same as their peers.

Students with SSN require these resources and facilities in order to facilitate effective learning. Therefore the study sought to find out the availability/ unavailability and the adequacy of these resources in Kenyatta University.

2.3 Classroom methodology for SSN

According to Falvey et al (1994), in an inclusive educational environments, learning is centred in the strengths, interests and needs of the students who are the community of learners as well as focused on the explicit and implicit core curricula. Although there is no one formula for creating effective inclusive classrooms, there are several critical elements that can assist educators to facilitate effective learning in an inclusive education.

The first element is creating a community of learners which is critical to establishing inclusive education. According to Kunc (1992), each student must acquire a sense of belonging to the group, a sense of connectedness for effective learning to take place. For this to be effective teachers are the major facilitator.

Since teachers are the major facilitators of effective learning in class they should establish a positive learning climate and also a safe, orderly and academically focused

environment for learning. The instructional strategies the teachers use are as follows; structure the physical environment to communicate order and academic focus, arrange furniture flexibly so that students have access to different types of learning activities for example small group cooperative learning activities, individual work, whole classroom discussion, active construction projects, formal and informal learning activities. The learning environment should also be arranged so that there are a variety of spaces for learning for example, listening to audio/video tapes, or class meetings. Teachers must consider things like typical traffic patterns, extraneous stimuli, equipment needed by individual students such as wheelchairs or computers and students who need additional individual support to optimize learning and minimize distractions. Lastly lecturers should monitor and adapt the plan as he or she finds that individual students need additional time to complete the task or need additional explanation for example. This is attested to by Mundi (2009) who said that though the strategies that teachers adapted may generally be similar but most of the strategies were dependent on the area of special need of the student. All these factors contribute to creating a community of learners which leads to effective inclusive education.

Falvey (1994) continues to say that, another element is assessment, curriculum and instruction. All students must have access to a core curriculum that is rich in content, although specific strategies for facilitating student learning of the core curriculum need to be based on individual learning styles. Curriculum is prescribed by the institution in other situations which will be a guidepost for lecturers. The curriculum should be designed in such away that it will ensure students who learn differently acquire the knowledge and skills reflected in the curriculum. Individualised approaches to learning must be developed for each student.

Berliner (1988) stated that teaching process involves a highly complex and dynamic set of tasks that require an extraordinary level of competence in making decisions in complex and dynamic environments. Assessment is an important component in teaching and learning process. Salvia & Ysseldyke (1991) define assessment as the gathering of information from a variety of tasks and a variety of sources for the purpose of making educational decisions about a student. Lecturers should assess their students in an interactive aspect of the instructional process in order to plan and implement learning activities that are student centered, emerge from the core curriculum and promote effective learning.

All these factors would lead to effective teaching/learning method which makes students gain maximum knowledge and skills hence effective inclusive education.

Therefore this study sought to determine teaching/learning methods and how appropriate they are to SSN in Kenyatta University.

2.4 Accessibility of SSN to the facilities

Universities and colleges are increasingly aware of the needs of students with special needs. Issues of accessibility, accommodations and movements of SSN are of paramount importance before placing students in mainstream institutions. The Salamanca statement of UNESCO (1994) when confronting the challenge of building inclusive school the current conditions must be taken into account. The physical environment in this case include the surrounding terrain, school building, classrooms and other facilities. This institutions have an obligation to make provision for students with special needs.

Each university or college should publish a Disability Statement explaining how it provides support. Support provided by colleges and universities could include: accommodation adapted for the needs of SSN, transportation within the institutions and assistance from volunteers. The Salamanca (1994) points out that inclusion will require investment in ensuring that buildings are fully accessible to all learners. The statement adds that most schools do not have basic facilities such as accessible classrooms or accommodations hence experiencing serious difficulties in the process of learning.

A study by Songe (2004) observe that institutions have low accessibility to the university facilities for students with special needs. Therefore this study sought to determine the accessibility to lecture rooms, transport and suitability of accommodation services in Kenyatta University.

2.5 Attitudes towards inclusive education

Individuals with Disabilities Education Act of 1990 and Individuals with Disabilities Education Act Amendments of 1991 ensured each student with a special need of the right to an education in the least restrictive environment. With proper support, student with special needs who are educated in general education setting with students without special needs have more opportunities for academic and social progress that are not possible in self contained settings. There should be a systematic teaching and carefully planned social interactions. All students should have a way to interact socially with their peers where communication is the key to success.

Oral and written language are the main forms of communication but in case of a student with special need this can be challenging, therefore adaptations should be made for a SSN to participate fully and reap the benefits of inclusive education.

Sage and Burrello (1994) said that beliefs and attitudes of the administrators toward inclusive education is a key factors influencing their behaviour towards students with special needs. Administrators who recognise benefits of inclusive education communicate their attitude in various ways to students and staff. Tyler (1983) stated that effective administration is very much aware of the symbolism of even the most mundane of their administrative actions and that they use even the most ordinary occasions to demonstrate their beliefs for examples occasions like graduations and seminars. Administration should be willing to work with students with special needs for an effective inclusive education.

Muchiri and Robertson (2000), argue that many barriers to inclusion of learners with disabilities existed within the local communities. This was accompanied by the general negative attitudes towards people with disabilities. Learning theories in this study emphasized attitudes as important determinants of one's behaviour. When individual had a negative attitude, this could be reflected in ones behaviour.

Johnson et al. (1994) stated that, the sources of an inclusive school depend considerably on early identification, assessment and stimulation of the very young students with special educational needs. For that to be effective, the teacher should be noted to be a major stakeholder and his or her attitudes toward inclusion are quite vital to implementation of the inclusive education at pre-school level. Long-term

positive teacher attitudes and effective policy on inclusion should be established and implemented.

In an inclusive environment the attitudes of all the participants including the management, staff and students is the greatest determinants towards positive attitude of students with special needs. Therefore the researcher sought to determine the attitude of students with special needs (SSN) towards inclusive education in Kenyatta University.

2.6 Conclusion

From the literature reviewed, it is evident that when teaching- learning resources are inefficient, they affect the quality of effective learning. When teaching-learning resources are available and adequate, learning and content delivery are effective. The study sought to find out the resources available/unavailable and if they are adequate to facilitate implementation of inclusive education in Kenyatta university.

Classroom instructions and methods used are prerequisite to quality education for SSN in an inclusive environment. These teaching learning methods include interaction of lecturers, curriculum modification, instructional flexibility, evaluation which are critical in implementation of inclusive education in Kenyatta university.

The study sought to determine the teaching-learning methods used by lecturers and how effective they are to students with special needs.

Accessibility to lecture rooms, accommodation and mobility within the university is paramount for a complete implementation of inclusive education. Students with

special needs, need to access classroom easily and move within the university conveniently and have suitable accommodation. Therefore this study sought to determine the accessibility of university facilities, transport facilities and suitability of accommodation services.

In addition positive attitudes of SSN are greatly influenced by the environment of the institution. Administration, staff and students' attitudes influence the attitude of SSN towards inclusive education. Therefore these participants should have positive attitudes towards SSN so as to implement inclusive education in the institution. This study sought to determine the attitude of SSN students towards inclusive education in Kenyatta University.

It's also important to note that Kenyatta university should fit in the Students with Special Needs rather than the SSN fitting in the university curriculum.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter deals with research design, location of the study, target population, sample and sampling procedure, research instruments, piloting of research instruments, reliability and validity of research instruments, data collection and data analysis.

3.2 Research Design

This study employed a descriptive study design. According to Abagi (1993), the researcher used this method because, descriptive research attempts to describe what is in the social system such as the school. Cathrine and Gullian (1994) defined case study as detailed investigation of one or more organization or groups within the organization with a view to providing an analysis of the context and process involved in the study of the phenomenon. This was supported by Barbara and Robert (1991) who pointed out that case studies involve in-depth investigation of units as small as an individual or as large as an entire community or region.

3.3 Location of the Study

The study was conducted in Kenyatta University, Nairobi County, Kenya. It is located along Thika Road 23km from Nairobi City Centre at latitude of 50.07° N and longitude of 08.41° E. It was formerly a military base. It borders Kahawa barracks to the South, Ruiru Town to the North, Kamiti Maximum Security Prison to the West and Kahawa Sukari Estate to the East.

The researcher chose the location because the university had the highest population of learners with special needs among other universities in Kenya. In addition Kenyatta University is an inclusive education institution and the admission of students with special needs has been going on for more than two decades.

Singleton, (1993), said that the ideal setting for any study should be easy and accessible to the researcher. Kenyatta University was easily accessible since the researcher lives near the institution and attained his undergraduate on the same institution hence he knows it well. As a SSN and teacher, it was the researchers' interest to carry out the study. This study was therefore able to find out how implementation of inclusive education is in Kenyatta University.

3.4 Description of Target Population

The focus of the research was the academic years 2008 to 2010. Mugenda and Mugenda (1999), defines population as a complete set of individuals cases or objects with some common observable characteristics. The target population were 45 SSN, 24 lecturers and 1 Deputy Vice Chancellor (Academic).

3.5 Sample and Sampling Procedures

Trochim (2005), states that "sampling is the process of selecting units (for example people and organizations) from a population of interest so that by studying the sample, we may fairly generalize our results back to the population from which the sample was chosen". Mugo, 1995; Mendy (2007) said that, a research sample is expected to mirror the population from which it comes. However, there is no

guarantee that any sample will be precisely representative of the population from which it comes.

The Deputy Vice Chancellor (Academic) was purposefully selected since it is an office held by one person.

Being the only institution with the highest number of SSN at the time of study, the DVC was interviewed to provide information on the institutions' plan and strategies regarding the SSN and the resources/ facilities used in the university.

Orodho (2005), maintains that in many education and social sciences studies, the sample should be selected purposively so that you are assured that such sub-groups in the population will be represented in the sample in proportion to the numbers in the population itself. This was used as a base to select twenty four lecturers from four departments with the highest population of students with special need. These departments were; Special education, philosophy and religious studies, education and History. The researcher randomly selected twenty four lecturers in the four department. A list from each department was used to give a number to all the lecturers which were written on separate pieces of paper of exact colour, texture and size then folded and mixed up in a paper bag. The researcher then picked twenty four pieces of paper of which the twenty four numbers indicated provided the twenty four sample lecturers from the departments. Lecturers were selected from each department as shown in the table below:

Table 3.1: Departments from which the lecturers were selected.

Department	Number	Percentage (%)
Education	7	29.2
Religious studies	7	29.2
Special Education	5	20.8
History	5	20.8
Total	24	100

The lecturers were chosen because they are the agent of curriculum implementation; they receive, interprets and implement the curriculum. They also consider the needs of different students whom they interact with in class.

The SSN were selected from each group of students with Special needs using the stratified method. Simple random sampling was used to select those students exceeding 10 from each group, while those who were less than 10 from each group were all involved. The groups included VI, PH, HI and albinism. The SSN provided information on the current state of implementation of inclusive education in the University. Students with Special Needs were grouped as follows:

Table 3.2: Groups of Special needs students

Group	Number	Percentage (%)
Visual Impaired	26	57.8
Physically Handicapped	10	22.2
Hearing Impaired	1	2.2
Albinism	8	17.8
Total	45	100

3.6 Research Instruments

Three types of research instruments were used in the study. These included;

3.6.1 Questionnaire

Questionnaire was one of the tools of data collection. They were administered to students with special needs and the lecturers. (Lovel and Lawson, 1970), said that questionnaires are widely used to obtain facts about current conditions and practices and to make inquiry concerning attitude and opinion. The questionnaires were structured according to the data required from the respondents. These were:

a. Students' Questionnaires

In this questionnaire, the objective was to gain general information on the status of the students in terms of gender, year of study and department. This was followed by questions prompting to know the form of disability, resources available, teaching methods, the attitudes, accessibility of the university facilities and suitability of accommodation services in the university.

b. Lecturers' Questionnaire

The first part of the questionnaire involved the general information like qualifications and experience in teaching. This was followed by questions that identified the understanding of lecturers in an inclusive University like adaptations in their teaching methodology and the strategies they use in classroom situations.

3.6.2 Interview Guide

An interview is a conversation between two or more people (the interviewer and the interviewee) where questions are asked by the interviewer to obtain information from the interviewee. (Hawryszkiewicz, 2001; Day, Sammons & Gu, 2008) note that interview is the process of gathering information by asking questions face-to -face. This method of collecting data is usually carried out in a structured way where output depends to a large extent on the ability of the interviewer.

Deputy Vice Chancellor (Academic)

The DVC (Academic) is the overall head of academics in the University. He was responsible for the strategic planning of academics in the University. Thus the researcher interviewed the DVC (academic) to gather information that included the strategies, strategic planning that include the resources, lecturers and physical facilities on inclusive education in the university.

3.6.3. Checklist

This is a list of items that the researcher would expect in a particular investigation. It's a guide on what was required. In this study, the actual resources available for the SSN were;

- (i) Are there tactile diagrams and charts?
- (ii) Are there enough Braille textbooks per student?
- (iii) Are there rumps in the lecture halls?
- (iv) Are there hearing aids for the H.I?

3.7 Piloting of Research Instruments

Wiersman (1985) observes that piloting is important for it help to identify misunderstanding, ambiguities and useless or inadequate items. Piloting involved five students with special needs, two lecturers and one DVC (Academics).

The questionnaires were administered to the students with special needs and the lecturers). Two weeks later the same questionnaires were administered to the same respondents. Orodho (1998) states that it will be assumed that responses to the test (questionnaires) would be very similar because the latter reflects the same thing (content) for respondents. Thus, it was expected that the scores obtained by each respondent on the first and second test was quite close.

Adjustments were made to remove any ambiguities in consultation with the supervisors.

3.7.1 Reliability

According to Frankel and Watlen (1993) reliability is the consistency of an instrument to yield the same results at different times. According to Orodho (2004), reliability of measurement confirmed the degree to which a particular measurement procedure gives equivalent results over a number of repeated trials. Test-retest technique was used to test the reliability of the instruments developed. The test was repeated after two weeks and the two results were compared using Pearson's product moment formula which established the extent to which the contents of the questionnaire were consistent in eliciting the same response every time the instrument were administered. The instrument used in the study was reliable since the researcher got a correlation coefficient of 0.85. This was alluded by Orodho (2008) who said that a correlation coefficient of about 0.8 should be considered high enough to judge the instrument as reliable for the study.

3.7.2 Validity

Cherry (2010) says that validity is the extent to which a test measures what it claims to measure. It is vital for a test to be valid in order for the results to be accurately applied and interpreted.

Validity in data collection means that your findings truly represent the phenomenon the researcher is investigating. Validity determines whether the research truly measures what it was intended to measure or how truthful the research results are.

Creswell, et al. (2000) said that validity is achieved through: divergence from initial expectations; extensive quotations; other research data like secondary sources; independent checks of the data; multiple researches; and counter checking of the findings with respondents to verify correctness of data captured. The instruments were

tested to establish whether the items represented what they were supposed to measure. An evaluation was done on the revised questionnaire and interview schedule for clarity.

3.8 Data Collection

Before carrying out the research, a research permit was obtained from the Ministry of Higher Education Science and Technology (MoHEST). The Vice Chancellor of Kenyatta University was contacted before administering the questionnaires and interview schedules. The principal researcher supervised the data collection. The actual data collection was undertaken by a research assistant who was given prior training on how to administer the instrument to ensure consultations did not take place between the participants. The visually impaired were given questionnaires in brail format and were required to answer in the same mood of brail. The researcher transcribed this information to print for coding purposes while the PH, HI and albinism were given questionnaires in print format and were required to answer in the same mode.

During the interview, the principal was the interviewer while a research assistant was taking notes. This was because the principal is a V.I and it was more efficient in terms of time and making corrections as opposed to using Braille which would have taken twice as much of time and plenty of noise in the office.

3.9 Methods of Data Analysis

Data collected was coded and entered in the computer to permit qualitative and quantitative for analysis using the Statistical Package for Social Science (SPSS). Simple descriptive statistic was used to analyse the data, these included percentages and frequency counts.

The discussions involved the various aspects of the institution which included lecture method, resources, attitudes, accessibility, accommodation and views on inclusive education that was subjected to analysis to come up with recommendations and conclusions to the research.

CHAPTER FOUR

RESEARCH FINDINGS, PRESENTATION AND DISCUSSION

4.1 Introduction

The data was collected, analysed, findings presented and discussed under the themes derived from the objectives of the study.

4.2 Resources available/unavailable and their adequacy to facilitate implementation of curriculum

Ainscow (1998), Porter and Richter (1991), assert that educators began to question how resources might be organized differently to include previously disadvantaged individuals in the mainstream communities. Booth (1996), Sapon-shevin (1992), point out that inclusive education should meet the educational needs of all learners within the community yet fluid context and activities should not be seen as just an ideal state or an idea but rather as an unending set of dynamic process. In the study done by Ogallah (2008) found out that resources were viewed to be more necessary in implementing inclusive education. He further said that teachers agreed that the available resources are inadequate.

The first objective of the study was to identify the resources and facilities available/unavailable and their adequacy for the researcher to understand the situation of the respondents in their daily academic tasks. An understanding of the resources was essential in establishing the available, adequacy and unavailable resources which are required to facilitate the implementation of curriculum. This was an important aspect attested by Songe (2004), who said financial implications of any programme should always be the first consideration before the execution of the programme. For instance, the introduction of the inclusive education in any regular institution would require

heavy investment in staff, equipment and resources and making adjustments in physical environment among other processes

The knowledge and necessity of the resources both physical and services in relation to curriculum implementation by service providers was also reviewed. When asked about the specific educational resources available for SSN, responses varied as indicated in the following discussion.

The kind of required and available resources for the SSN differs as to the type and condition of the disability.

4.2.1 Visual Impaired students (VI)

VI forms the largest number of respondents and when asked to specify educational resources that are available for them, VI stated the following in the table below;

Table 4.1: Availability of resources/facilities for the VI students

Resource Available	No. of students	Percentage (%)
Braille Machine	21	81
Braille exams	16	61.5
CCTV	11	42.3
Computer with JAWS	6	23
Exams in Large Print	2	7.6
Reading Area	3	11.5
Braille Books	2	7.6
Unlimited Borrowing of Books in the Library	2	7.6
Talking Books	1	3.8
Encyclopedia	2	7.6
Tapes	2	7.6
Special Tables in Lecture Halls	1	3.8

From the above table, students with V.I stated that the Braille machine were available at 81%; Braille exams at 61.5%; the CCTV provided at 42.3 % ; computer with JAWS at 23%; exams provided in large print at 7.6% , reading areas at 11.5%; the Braille books provided to them at 7.6%; unlimited borrowing of books in the library at 7.6%; talking books at 3.8%; encyclopaedia at 7.6%; tapes at 7.6% and special tables in lecture halls at 3.8%.

This was confirmed with the use of checklist that showed all these resources/facilities were available as stated by the student. The students said that they lacked Braille papers which is their main form of writing notes.

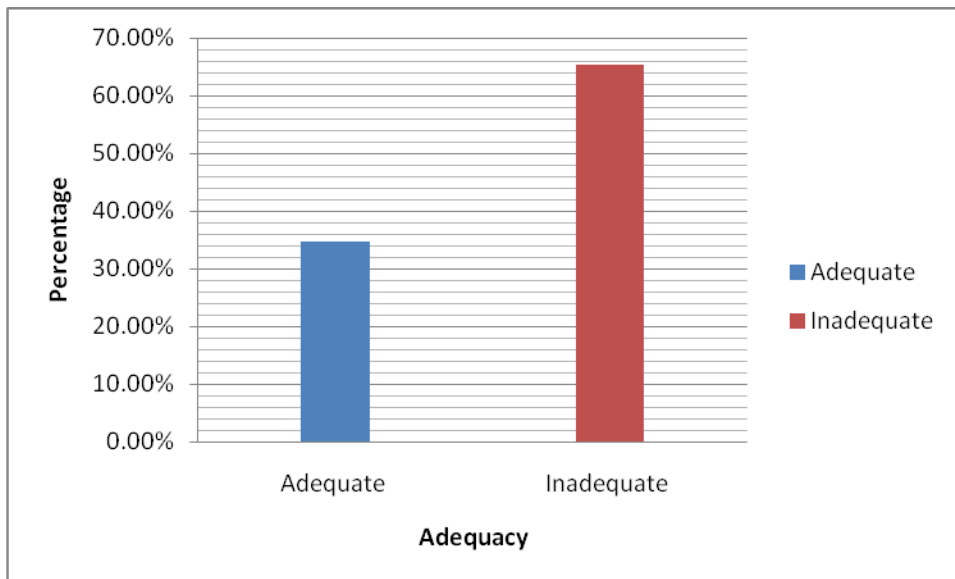


Fig. 4.1: Adequacy of resources/facilities of visual impaired students

Warger & Pugach (1996) stated that in the context of inclusive schools, students with a wide range of learning and behavioural characteristics are not themselves considered so much a part of the problem. However when asked if they are adequate, 17 (65.4%) stated as inadequate while the remaining 9 (34.6%) stated as adequate. This is further proved by the following resources which were stated as necessary but are inadequate;

- i. Braille materials
- ii. CCTV
- iii. Recorded books
- iv. Modern computer soft wares with narrator.
- v. Resource rooms
- vi. Large print notes

- vii. Brail machine – converted books in Braille format.
- viii. Different kinds of important books in Braille format i.e. atlas, encyclopaedia etc
- ix. Modern audio materials

Willoughby (1980) states that the media and material do play an important role in the education of children and youth with impaired vision. Such specialized equipment and material include mobility white cane, Braille writers and papers, tape recorders, specialized computers and other audio visual department.

VI – 65.4% stated the resources/facilities available are not adequate. Though the university provided reading rooms, audio software books and few brail books, the students proposed more facilities and resources to be provided to make their learning effective. The DVC (Academic) concurred that the resources/facilities are available in the university but they are inadequate. He attributed this to the lack of a comprehensive and clear policy whereby students were provided for these resources/facilities when they requested for them rather than the university providing for them from the onset.

4.2.2 Physically Handicapped (PH)

Most of the PH are perceived by many as students without special needs. However, they had their special needs and resources that they required for the inclusive curriculum.

When they were asked for the specific educational resources available for them in the questionnaires, all (100%) stated the resources were available. These included;

- i. Books in the library.
- ii. Computers.
- iii. Library and
- iv. Reading area

This was shown in the table below

Table 4.2: Availability of resources/facilities for the Physically Handicapped

<i>Resource Available</i>	<i>No. of students</i>	<i>Percentage (%)</i>
Library	6	55
Computers	2	18
Reading area	1	9
Ramps	1	9
Books	1	9

From the table above the P.H students stated that library were available at 55%, computers at 18%, reading area, ramps and books at 9%.

A check list confirmed the availability of these resources/facilities.

Although these students said that the resources and facilities are available, they lacked provision of wheel chairs, callipers and spare parts. Their greatest challenge is on movement within campus which they were assisted by the use of motorized tri-cycles (tuk tuk).

However, when asked on the adequacy of the available resources, they responded as shown in the figure below

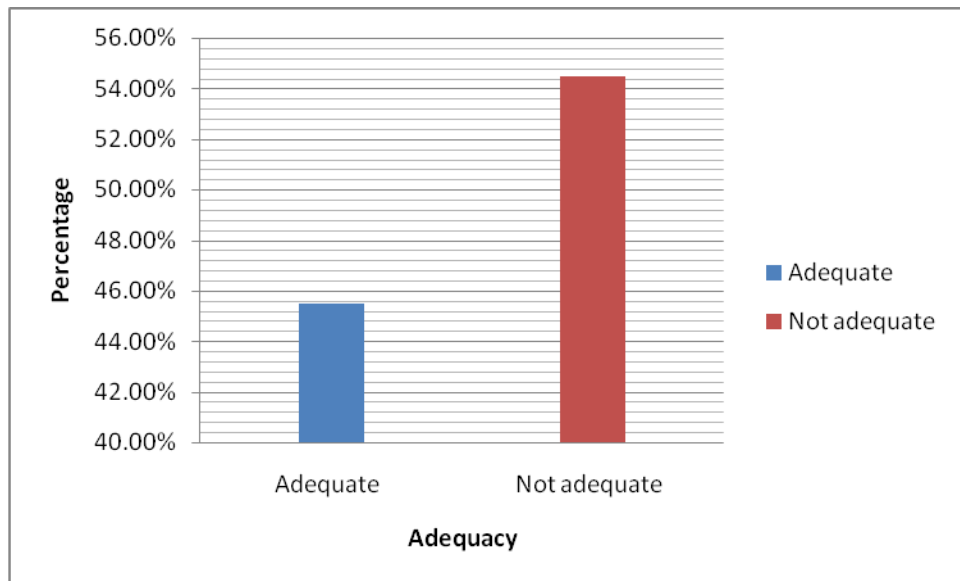


Fig. 4.2: Adequacy of resources/facilities to the Physically Handcapped students

From the above graph, 6 (54.5%) stated that they were not adequate while 5 (45.5%) stated as adequate. Those who stated as not adequate pin pointed the following resources/facilities as necessary but not adequate:

- i. Books on disability in the library.
- ii. Spare parts.
- iii. Accessibility of the library and computer labs.
- iv. Special reading tables and sits.
- v. Large print books.
- vi. Ramps.

vii. Use of computers and projectors – clear visibility.

This was concurred by the DVC (Academics) who said that these group of students only required the resources/facilities provided by the university therefore there were no additional consideration for them except provision of ramps and motorised tri-cycles (tuk tuk).

PH – They stated that they use the resources used by other students which were not adequate. Most of the resources/facilities were available but they were not adequate. Although they are able to use the resources/facilities used by the students without special needs, special attention should be given to facilities such as ramps, tuk tuk which will assist in accessing education.

4.2.3 Hearing Impairment (HI)

There was only one respondent of HI. The researcher observed that the respondent had minimal hearing which was assisted by the use of hearing aid for communication during the administration of the questionnaire. He stated that he was able to use all the resources/facilities that are available in the university, but he lacked a sign language interpreter and hearing aids which are very important for him during lecturers. This was supported by the DVC (Academics) who said that university did not provide any resource specific to students with hearing impairments.

The total lack of sign language interpreters and hearing aid has led to the minimal admission of students with hearing impairment. This is one group of students university need to provide resources and facilities so as to increase the admission.

4.2.4 SSN with albinism

Eight students with more than one special needs responded with half of them (50%) stating that the resources available to them were adequate. All (100%) of the respondents are albino with other disability (VI) and the resources that are available for them are shown in the table below;

Table 4.3: Available resources

<i>Resource Available</i>	<i>No. of students</i>	<i>Percentage (%)</i>
Reading Area	2	33.33
CCTV	5	83.33
Large Print Exams	5	83.33
Talking Books	1	16.67

From the above table the students with albino stated that reading area was available at 33.33%, CCTV at 83.33%, Large print exams at 83.33% and talking books at 16.67%.

Checklist was used to verify these resources/facilities.

However when asked if the available resources were adequate they responded as shown in the figure below;

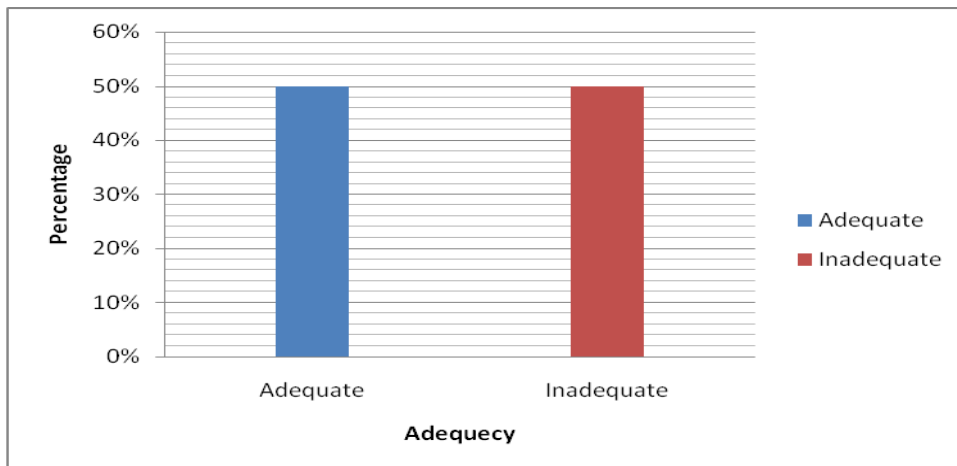


Fig. 4.3: Adequacy of resources/facilities for the students with more than one special need.

The resources that they stated as necessary but not adequate are;

- i. Modern computers in their resource rooms.
- ii. Notes to be issued in soft copy by the lecturers.
- iii. Braille machines – convert books in brail forms.
- iv. Provide more large print books and servicing of the machines used by SSN.

The DVC (Academic) alluded to this stating that more of these resources/facilities need to be provided.

The students with albinism will have the same needs of resources and facilities as students with visual impairment therefore when resources and facilities of one group is addressed they all benefit.

4.3 Teaching and learning methodology

Stanovich et al. (2002) state that, teachers in inclusive settings are responsible for creating learning opportunities and removing barriers to learning and participation in their classrooms. McLaughlin, et al. (1992) say that the standard curriculum continues to pose problems for students with special need and thus affects the ease and success with which inclusion can take place.

For inclusive education to be implemented effectively, teaching and learning methodology is the key. This objective was key in identifying how appropriate the teaching and learning methodology for training students with special needs at Kenyatta university from the respondents.

Howarth (1988) in her belief that the aim of the inclusive curriculum should be to ‘to ensure that every student has the cognitive tools for independent survival; literacy and numeracy skills and understanding and the ability to adapt, to make new relationships with people, to negotiate, to enquire and to make judgments’.

Different methodologies could be used by lecturers in different teaching environments, the subject being taught and the types of students in class to ensure learning takes place. For inclusive education to be effective, interaction between SSN and the lecturers is key. The figure below shows if the lecturers understand interaction between Students with special need and students without special needs.

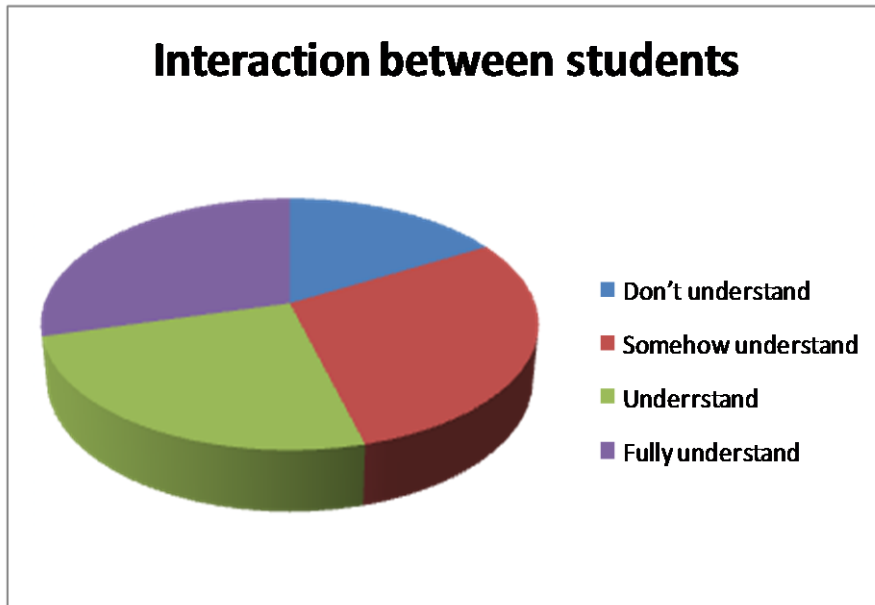


Figure 4.4: Interaction between students

From the figure above it is clear that, out of the 24 respondents, 4 (16.7%) did not understand how to encourage interaction between students with and without special needs, 7 (29.2%) somehow understood, 6 (25%) understood and 7 (29.2%) fully understood.

An investigation done by Burogo (2005) found that teachers strongly agreed that students have a right to education in any school. They also said that students with special needs require more attention in any institution. Out of the 7 lecturers who fully understood the interaction between the students with and without special, 5 of them were lecturers from Special Education Department. It is clear that lecturers in the university do understand how to encourage interaction between students with and without special needs and this enhances the learning process for these students.

Lecturers further specified the following ways for encouraging interaction between students with special needs and without special needs;

- i. Interactive group revision and assignments
- ii. Engaging SSN in class discussions, assignments and assigning them responsibilities
- iii. Sharing resources and assigning students without special needs to read for the VI or assisting other SSN
- iv. Involve the students in a debate to express their feelings and understanding on SSN.
- v. Change attitude of students towards SSN
- vi. Ensure the SSN get a chance to fully participate in class.

Where there was a large number of students in the class, tutorials were used. This showed that lecturers understood interaction between students with special needs and those without special needs.

Warger and Pugach (1996) add that curriculum after all, is at the heart of schooling. When asked if they understand how to modify the curriculum content to suit special needs students, they responded as shown in the table below

Table 4.4: Lecturers response on interaction between students with and without special need

Response	Number	Percentage
Don't Understand	10	41.7%
Somehow Understand	2	8.3%
Understand	6	25%
Fully Understand	6	25%
Total	24	100%

From the table above 10 (41.7%) stated they did not understand, 2 (8.3%) somehow understood while the remaining 6 (25%) understand and 6 (25%) fully understands. Out of the total respondents, only 6 (25%) specified the following as the specific ways that they modify the curriculum;

- i. Trained to teach SSN and have teaching experience with the SSN.
- ii. They simplify and explain contents for easier understanding to the SSN.
- iii. Provide relevant notes and books in different formats that suit the SSN.
- iv. Reducing and enriching curriculum content in a way that will benefit the SSN.

A good number of lecturers in Kenyatta University did not understand how to modify the curriculum which signified a gap in knowledge in modification of curriculum of the SSN. All the special education lecturers fully understood how to modify the curriculum which was as a result of being trained in the skills to teach students with special needs. This was affirmed by the research done by Burugo (2005) who found that teachers in regular institutions needs in-service training. He added that teachers trained in special education find it easier to teach the students with special need that inclusion of SSN calls for changes in curriculum in institutions.

The efficiency of the modified curriculum content will depend on the mode of delivery. Lecturers were asked if they understand how to provide instructional flexibility in a classroom with SSN and their response was summarised in the table 4.5;

Table 4.5: Lecturers response on instructional flexibility

Response	Number	Percentage
Don't Understand	9	39.1%
Somehow Understand	2	8.3%
Understand	8	33.3%
Fully Understand	4	16.7%
Missing	1	2.6%
Total	24	100%

From the table above its was clear that 39.1 % of lecturers did not understand on how to provide instructional flexibility, 8.3 % somehow understand, 33.3% understand and 16.7% fully understand.

Jackson and Harper (2002) said that, much has been changed in classrooms in the last 20-25years.

- (a) There is increasing cultural, ethnic and linguistic diversity.
- (b) More students with disabilities are in general education classrooms.
- (c) Inclusive Education is seen as a service rather than as a place to send children.
- (d) Lecturers and Universities are held more accountable for the performance of students.

Out of the 14 respondents who stated they somehow understand, understand and fully understand, only five (35.7%) specified how they do it;

- i. Use of different learning task; talking, listening and problem solving methods.
- ii. Give more time and use special tools that is appropriate to the SSN.
- iii. Seek SSN suggestions and agree on the way forward.

- iv. Use variety of instructional techniques in a classroom situation.

The results showed that most of the lecturers did not know how to provide instructional flexibility to students with special needs. This was supported further by the lecturers who said that they understood and they could not explain how they did it.

The performance of inclusive education is evaluated on the performance of students. Based on the different special needs, lecturers were asked if they understood how to evaluate the SSN in their classroom, the response was shown in the table below

Table 4.6: Lecturers response on evaluating the SSN in their classroom

Response	Number	Percentage
Don't Understand	9	37.5%
Somehow Understand	6	25%
Understand	2	8.3%
Fully Understand	4	16.7%
Missing	3	12.5%
Total	24	100%

From the table above, nine (37.5%) of lecturers did not understand how to evaluate SSN in their classroom, six (25%) somehow understands, two (8.3%) understands, four (16.7%) fully understands while three (12.5%) did not respond on this question.

Five respondents specified the following as the ways that they evaluate SSN;

- i. They modify the questions to suite SSN for example; questions on graphs
- ii. They are trained on how to evaluate SSN.
- iii. Sometimes they discuss the solutions to those concerned for example other specialist lecturers on the field.
- iv. Some are experienced on handling and evaluating SSN.

- v. At times they provide alternate question or different format of the examination but testing the same concept.

Although the figures show that most of the lectures know how to evaluate SSN, it is revealed that only five could explain the ways they used to evaluate SSN. This indicates that most of the lecturers did not understand how to evaluate the SSN in their classrooms.

Lecturers' response on teaching methodology is summarised in the diagram below;

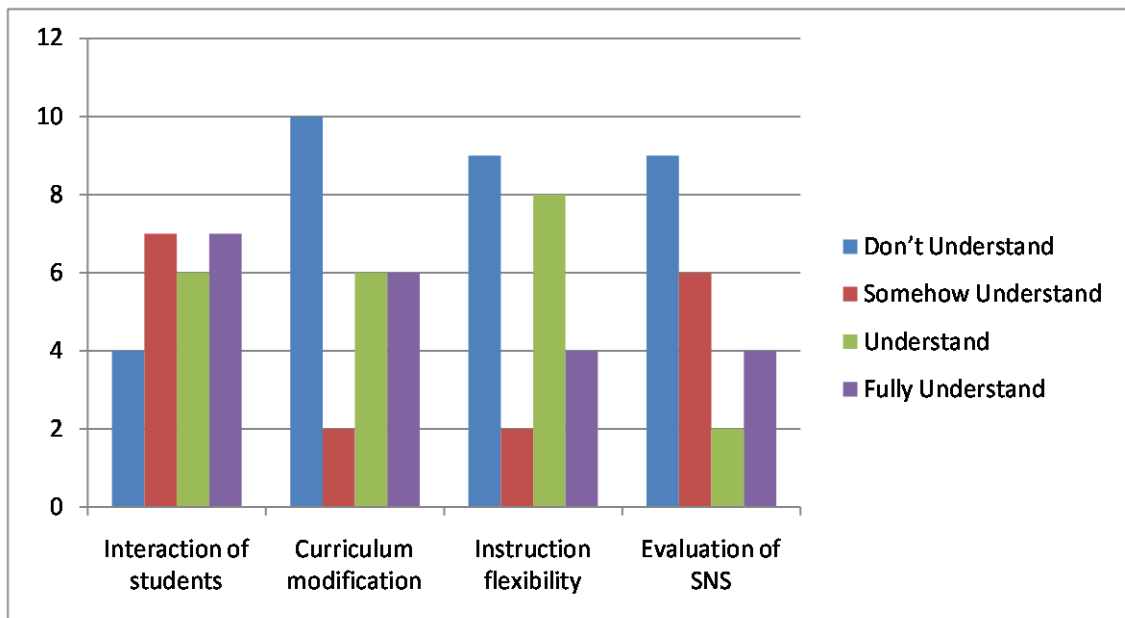


Figure 4.5: Summary of Lecturers response on teaching methodology

From the above diagram summarizes the tables on interaction of students with and without special needs, curriculum modification, instruction flexibility and evaluation of SSN.

White et al. (1998) found that regardless of the target students 'reputation' negative teacher feedback caused the target to be treated as less likable, less deserving of

rewards, and more likely to be in trouble. As the learners are recipient of the inclusive education, the SSN respondents were asked if the teaching methodology used by lecturers were appropriate and what they thought lecturers could improve on their teaching methods. Their response is summarised in the figure below.

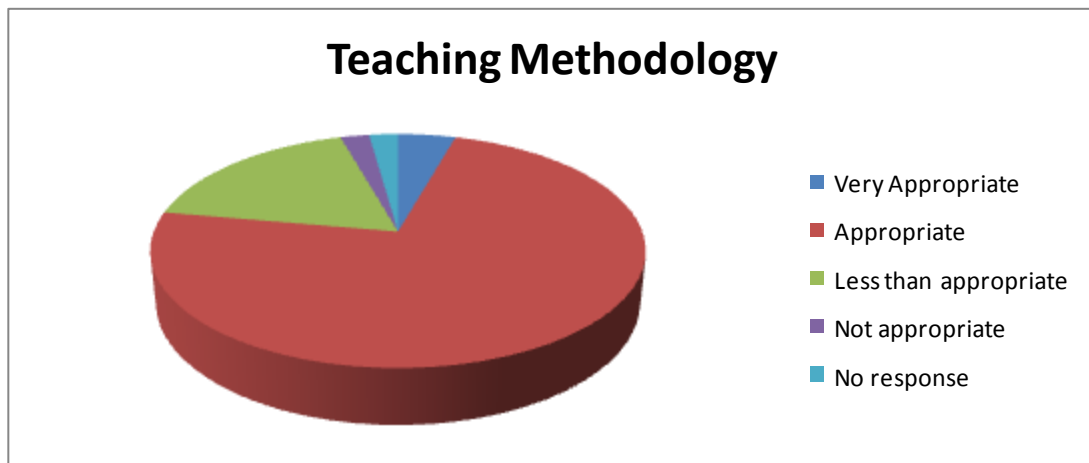


Figure 4.6: SNS response on teaching methodology

Out of 45 respondents, 2 (4.4%) rated the teaching methodology as very appropriate, 33 (73.3%) as appropriate, 8 (17.8%) as less appropriate, 1 (2.2%) as not appropriate and 1 (2.2%) was missing data.

This valuation is distributed evenly among the SSN responses as it's further shown in the table below;

Table 4.7: SNS response on teaching methodology

Valuation	Percentage (%)			
	VI	PH	HI	>one SN
Very Appropriate	3.8	10	0	0
Appropriate	73.2	90	0	62.5
Less than Appropriate	19.2	0	0	37.5
Not Appropriate	0	0	100	0
Missing/no response.	3.8	0	0	0
Total	100	100	100	100

Most of the visually Impaired and Physically Handicapped students said that the teaching methodology in the university was appropriate at 77% and 100% respectively. Hearing Impaired student found the teaching methodology not appropriate which was as a result of lacking a sign language interpreter and hearing aids to facilitate learning. This was affirmed by Songe (2004) who said many lecturers in institutions lack formal training in handling students with special need

The students with the albinism gave a higher less than appropriate response compared to the visually impaired students at 37.5% which showed that they faced other issues apart from the teaching methodologies that was provided by the lecturers.

SSN responded differently on what lecturers should improve on their teaching methodology.

VI pinpointed in the following;

- i. Lecturers should provide notes in soft copy

- ii. They should minimise the use of blackboards
- iii. Move with the students/keep in touch with the students so that they learn.
- iv. Prepare diagrams in a format that they understand
- v. Consider special needs students in their classes
- vi. Lecturers should be taught how to handle students with visual problems.
- vii. Spell hard terminologies and move with average speed
- viii. Should provide in Braille materials of what the lecturer is presenting on the board

From the above information, if the lecturers will put more effort to cater for the needs of these students, they shall greatly enhance the learning process for them.

The PH identified the following;

- i. Lecturer should consider the individual difference like speed, visual ability
- ii. They should keep time during their lectures.
- iii. Lecturers need training on how to handle students with special needs
- iv. They should pay attention to students with special needs
- v. They should be elaborative when they are teaching.

These needs indicate that the PH do not need any modifications in the teaching method used by the lecturers.

The HI needs;

- i. A sign language interpreter in the lecture rooms
- ii. Notes in soft copy

Students with H.I will not need changes in teaching methods. It's important that a sign language interpreter should be present in all lectures he/she attends.

The respondents with more than one special need (albinism) require improvement on the following areas;

- i. Attention given to the students with special need should be improved.
- ii. Lecturers should provide notes in soft copy.
- iii. Student centred method of teaching should be effected.
- iv. Lecturer should provide more explanation and minimise the use of black board.

This information shows that students with albinism have almost similar needs as the visually impaired students. Though the emphasis is on the large print materials whether in hard or soft copies.

4.4 Accessibility, transport facilities and suitability of accommodation services

Baker and Donnelly (2001), argue for the adoption of an environmental perspective when examining the experiences of students with special needs. The study sought to investigate the accessibility to lecture rooms, facilities for transport and suitability of accommodation services for the special needs students. This objective was essential in establishing the condition of SSN outside the classroom situation which provided the baseline for interpreting the sufficiency of available facilities in enhancing inclusive education.

The accessibility, mobility and suitability of accommodation services differed with the students, their disability and the condition of their needs.

4.4.1 Accessibility

Generally, when asked how accessible were their lecture rooms, they responded as shown in the figure below

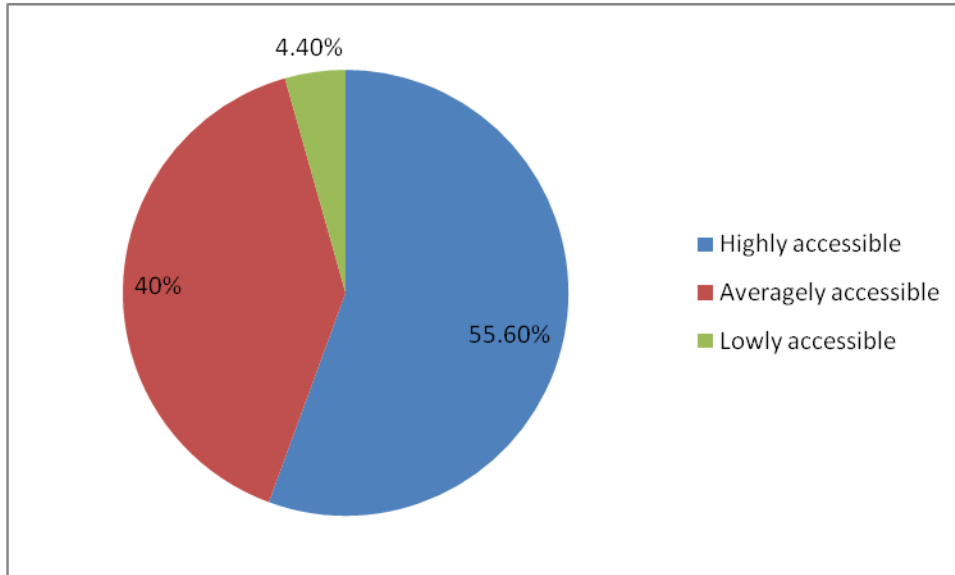


Figure 4.7: Accessibility of resources/facilities

From the figure above it is clear that 25 (55.6%) of the SSN students stated facilities/ resources as highly accessible, 18 (40%) averagely accessible and two (4.4%) as lowly accessible. This was based on analysis of the physical allocation of the place, distance and the general environment.

When further analysed as to the respondents disability, their response was summarised in the table below

Table 4.8: Cross tabulation on the Accessibility of lecture rooms

Kind of disability		How accessible are your lecture rooms?			
		Highly accessible	Averagely accessible	Low accessibility	Total
VI	Count	12	13	1	26
	% of Total	26.7%	28.9%	2.2%	57.8%
PH	Count	5	4	1	10
	% of Total	11.1%	8.9%	2.2%	22.2%
HI	Count	1	0	0	1
	% of Total	2.2%	.0%	.0%	2.2%
More than one	Count	7	1	0	8
	% of Total	15.6%	2.2%	.0%	17.8%
Total	Count	25	18	2	45
	% of Total	55.6%	40.0%	4.4%	100.0%

From the table above 12 (26.7%) of the VI stated as highly accessible, 13 (28.9%) as averagely accessible and one (2.2%) as lowly accessible. The PH stated as follows: 5 (11.1%) as highly accessible, 4 (8.9%) averagely accessible and 1 (2.2%) as lowly accessible. There was 1 (2.2%) HI respondent who stated as highly accessible while for the respondents with more than one disability, 7 (15.6%) out of eight stated as highly accessible and the remaining 1 (2.2%) as averagely accessible.

The table reveals that most of the students with special needs said that the university facilities were accessible. The DVC (Academic) concurred with this as one of the ways in which they were gradually implementing inclusive education in terms of physical accessibility. The checklist used showed that the university has been

facilitating accessibility through construction of pedestrian paths and ramps on the roads and buildings.

4.4.2 Transport

Kenyatta University provided means of transport for the SSN to ease their movement within the University. This means of transport were; motorised tri-cycles popularly known as ‘tuk tuk’. To evaluate the efficiency of the transport services, the respondents were asked how frequent the means of transport to their lecture rooms and hostels was. This was shown in the figure below

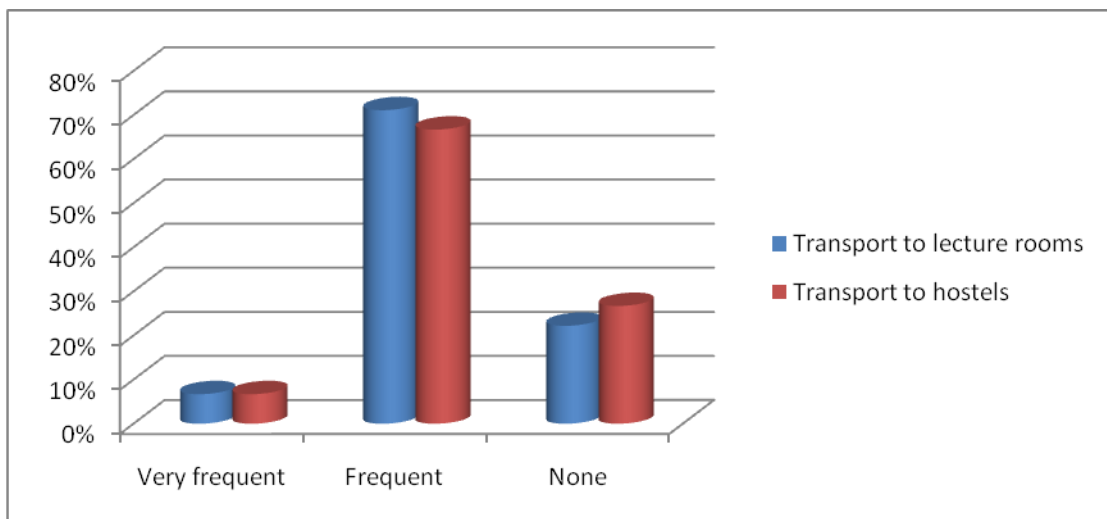


Figure 4.8: Transport Services

Form the figure above, On the transport to their lecture rooms, 3 (6.7%) of the respondents stated as very frequent, 32 (71.1%) as frequent and ten (22.2%) stated as none/ they don't get access to the transport services within the university.

While on transport to the hostels, 3 (6.7%) of the 45 respondent stated as Very frequent, 30 (66.7%) as frequent and 12 (26.7%) stated they do not get access to transport services to their hostels.

Generally transport facilities provided in the university is frequent to all the students with special needs. This was alluded too by the DVC (Academics) who said that the university provided the ‘tuk tuks’ to enhance accessibility to both lecturer rooms and hostels. The checklist used showed that out of the five initial ‘tuk tuks’ that were bought only two were operational.

Further, the analysis of the mobility services available based on the kind of disability is depicted in the table below;

Table 4.9 Availability of transport to the lecture rooms

		How available is the transport to your lecture rooms?				
		Very frequent	Frequent	None	Total	
Kind of disability	VI	Count	1	23	2	26
		% of Total	2.2%	51.1%	4.4%	57.8%
	PH	Count	1	7	2	10
		% of Total	2.2%	15.6%	4.4%	22.2%
	HI	Count	0	0	1	1
		% of Total	.0%	.0%	2.2%	2.2%
	More than one	Count	1	2	5	8
		% of Total	2.2%	4.4%	11.1%	17.8%
Total		Count	3	32	10	45
		% of Total	6.7%	71.1%	22.2%	100.0%

From the above table; 1 (2.2%) of the VI stated as very frequent, 23 (51.1%) as frequent and two (4.4%) as not available to them. For the PH; 1 (2.2%) stated as very frequent, 7 (15.6%) as frequent and 2 (4.4%) as not available. The one response from the HI termed it as not available while out of the remaining eight respondents with

more than one disability, 1 (2.2%) stated as very frequent, 1 (4.4%) stated as frequent and 5 (11.1%) as not available.

As was on the case of the general transport services (depicted on figure 4.5) the availability of the transport services to the hostels based on the kind of disability is also similar to the transport services to the lecture room except on the difference of one responded on frequency of the VI and PH. 22 VI stated as frequent while 6 PH stated as frequent. It is important to note that the HI student said that the transport services is not available to him since he does not require this transport.

Besides using the transport services as a means of movement, SSN also uses pedestrian walks. This is very appropriate especially to those on wheel chair, tri cycle and on the event of lack of transport services. When asked how appropriate are pedestrian walks to the classroom, were responded as shown in the figure below

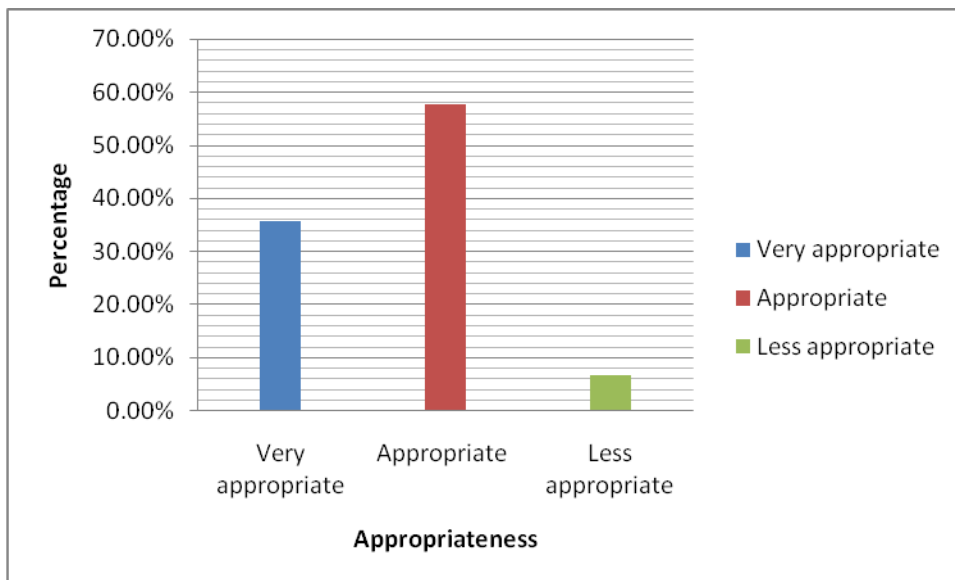


Fig. 4.9: Appropriateness of transport services to the SSN

From the figure above 16 (35.6%) stated as very appropriate, 26 (57.8%) as appropriate and 3 (6.7%) less appropriate.

From this foregoing, it is clearly shown that mobility services including the pedestrian walks was appropriate. This in terms of physical access has been worked on by the university as per the interview with the DVC (Academics). This was shown in the checklist whereby pedestrians walks have been well constructed to ease the movement of of students with special needs more so for the PH students.

4.4.3 Suitability of accommodation services

Kenyatta University provided separate accommodation services for the SSN to cater for their individual differences. Thus, when asked the suitability of the accommodation services they responded as indicated in the table below

Table 4.10: Suitability of accommodation services

<i>Response</i>	<i>Frequency</i>	<i>Percentage</i>
Very suitable	8	17.8%
Suitable	34	75.6%
Not suitable	3	6.7%

From the table above it was clear that 8 (17.8%) out of the 45 respondents rated it as very suitable, 34 (75.6%) as suitable and 3 (6.7%) as not suitable.

The response is evenly distributed among the respondents as shown in the figure below

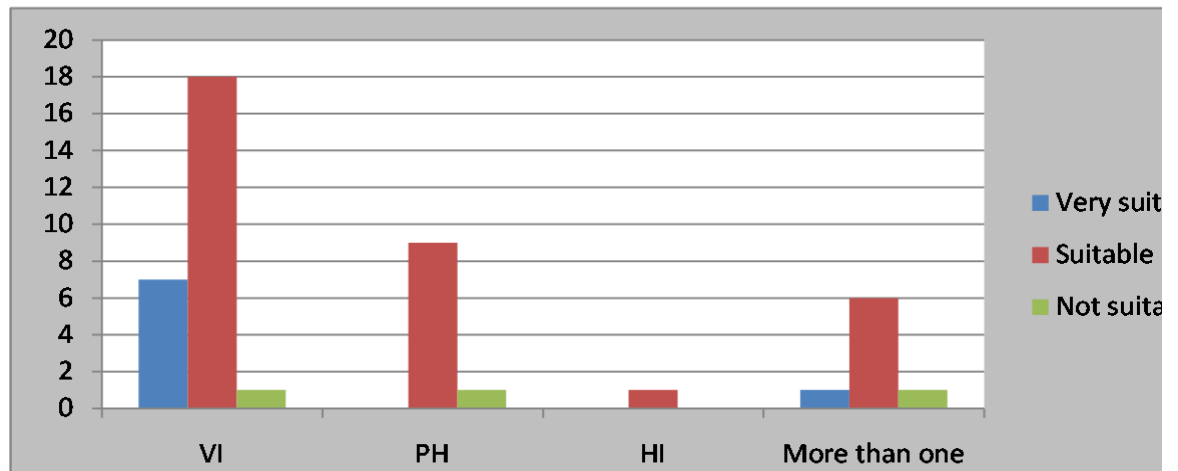


Figure 4.10: Response on the pedestrian walk

From the figure above, 7 VI which represents 15.6% of the total respondents rated the accommodation as very suitable, 18 (40%) as suitable and 1 (2.2%) as not suitable. Out of the 10 PH of the total respondents, 9 (20%) rated as suitable and the remaining 1 (2.2%) as not suitable. The HI rated it as suitable as those with more than one disability rated as; 1 (2.2%) very suitable, 6(13.3%) suitable and 1 (2.2%) as not suitable.

From the diagram it is clear that accommodation services in the university were suitable to all students with special needs. This was also confirmed in the checklist when researcher visited the accommodation facilities and found that these students were given hostels that were appropriate to them. The DVC (Academics) said that priorities are given to students with special needs when allocating accommodation services to the students.

4.5 Attitudes of students with special needs towards inclusive education

According to Johnson (1994), all human beings have the same basic needs of belonging, love, and the need to participate in stimulating activities and to develop positive self-image among other needs. For an inclusive education to be effective, students with special need must have a positive attitude towards it. According to Forest (1990) friendships and relationships are actually preconditions to learning in institutions. If a student feels unconnected and as if he or she does not belong, then the student is not able to learn to his or her fullest potential. Therefore students were asked how comfortable they were in inclusive classrooms. Their response were shown in the table below:

Table 4.11: Comfortability of SSN

Response	Frequency	Percentage
Yes	42	93.3%
No	2	4.4%
No answer	1	2.2%
Total	45	100%

The table above shows that 42 (93.3%) said yes, 2 (4.4%) said no and 1 (2.2%) did not answer.

The students who were not comfortable were one PH student and a student with albinism which indicates all the groups of the students with special needs were comfortable in an inclusive setting.

Further, the respondents who answered 'Yes' gave the following reasons to elaborate their answers.

- Inclusive classroom makes them feel good.
- Inclusive environment enhance competition with others which motivates them.
- It breaks the stigma and discrimination of disability.
- It's a good exposure that enhances socialization with other students.
- It creates a forum to learn from others and create awareness on disability.
- Helps one to get friends and other students to assist them e.g. reading books.
- Improve confidence and enhance interpersonal skills.
- Makes learning interesting
- Good for group discussions with the students without special needs.
- Makes one feel accepted and integrated into the society by the students without special needs.

The two who are not comfortable gave the following reasons;

- Most of the classes are on the first floor and densely populated hence getting a sitting space is hard.
- Fear of being attacked that is albinos fearing being sold to witch doctors for their skin in Tanzania.

Despite the fact that there is no policy and general guideline for implementation of inclusive education, 93.3% stated they like inclusive education for it reduces rate of discrimination, challenges the SSN and motivates them to work hard.

From this information gathered it is clear that students with special needs gain a lot of exposure as a result of being in an inclusive education.

According to Stainback (1996), it is through socialization with a diversity of peers in the mainstream that students learn ,find meaning and purpose to and gain a greater understanding of the many subject areas covered in school. When the respondents were asked to describe the attitude of other students towards them, their response are as follows 6 (13.3%) of the total respondents stated as very good, 38 (84.4%) as good and 1 (2.2%) as poor.

The response were evenly distributed among the respondents; VI responded as shown in the table below;

Table 4.12: Attitude of other students

Kind of Disability	Description of the attitude of other students towards you (SNS)			Total	
	Very good	Good	Poor		
VI					
	Count	5	21	0	26
		11.1 %	46.7%	0%	57.8%
PH					
	Count	1	9	0	10
		2.2%	20.0%	0%	22.2%
HI					
	Count	0	1	0	1
		0%	2.2%	0%	2.2%
More than one					
	Count	0	7	1	8
		0%	15.6%	2.2%	17.8%
	Count	6	38	1	45
	% of Total	13.3%	84.4%	2.2%	100.0%

From the table above, the VI responded as follows: 5 (11.1%) said it was very good, 21(46.7%) good and 0 (0%) poor. PH responded as follows; 1 (2.2%) very good, 9(20.0%) good and 0 (0%) poor. HI responded as follows; 0 (0%) very good, 1(2.2%) good and 0 (0%) poor. Those with more than one special need; 0 (0%) very good, 7 (15.6%) good and 0 (0%) poor.

Thus from the data analyzed students with disabilities have a good relationship with their peers which is very positive for their whole well being.

According to Ndurumo (1984) attitudes are powerful because they permeate society, and depending on the severity of impairment, are more handicapping than the handicap itself. Though the attitude of students with special need is positive from the data above, disability is stigmatised. When asked if they had experienced stigma being in an inclusive environment, they responded as follows

Table 13: Stigmatization of SSN

Response	Frequency	Percentage
Yes	32	71.1%
No	12	26.7%
No answer	1	2.2%

From the table above 32 (71.1%) stated yes, 12 (26.7%) stated no while 1 (2.2%) did not respond.

most of the students with special needs have faced stigmatization as a result of being in an inclusive education. This is as a result of students without special needs not having previous interaction or lack of knowledge on how to have interpersonal relationship with them. This was alluded by Songe (2004), whose findings showed that students without special needs have low attitudes towards students with special needs. Bishop (1990) points to the fact that the attitudes of non handicapped students in regular education environment can be critical to the success of the student with handicap in that kind of setting

When the SSN students were asked if they assistance from their peers without special needs, they responded as shown in the table below:

Table 4.14: Assistance from peers without special needs

<i>Response</i>	<i>Frequency</i>	<i>Percentage</i>
Very ready	5	11.1%
Ready	31	68.9%
Not ready	9	20%

From the table above five (11.1%) stated students without special needs are very ready to assist them, 31 (68.9%) stated students without special needs are ready to assist them while 9 (20%) said students without special needs are not ready to assist them when they require assistance from them.

The response were distributed evenly as shown in the figure below

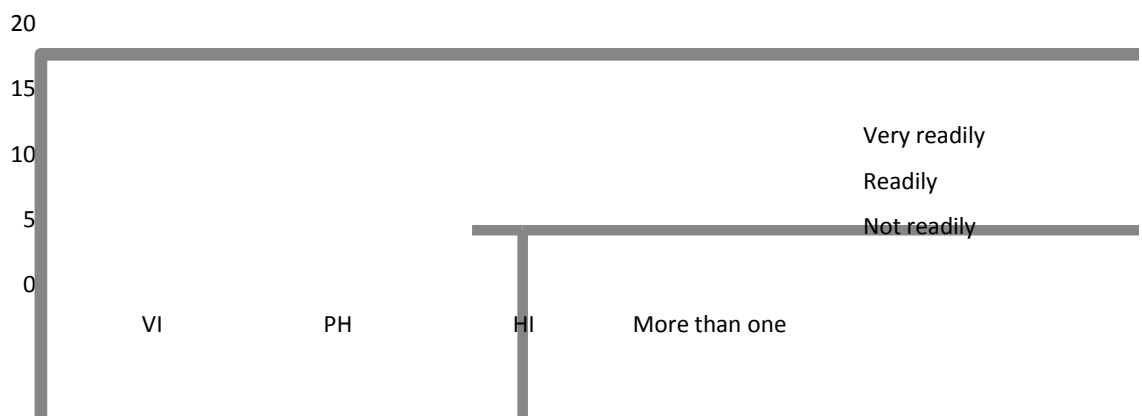


Figure 4.11: Response of the SNS on the assistance from the mainstream students

From the figure above five (11.1%) who stated that students without special needs are very ready to assist them, three (6.7%) are VI and two (4.4%) are PH. Those

respondents who stated as ready were VI sixteen (35.6%), PH seven (15.5%) and students with more than one disability six (13.3%). The respondents who stated students without special needs are not ready to assist them were seven (15.6%) VI and two (4.4%) students with more than one disability.

From this foregoing then information gathered showed that students without special needs were ready to assist students with special needs. The DVC (Academics) stated that the university through the Kenyatta university disability centre was working towards awareness and sensitization of students with special needs to the whole university community. This is all in the philosophy of inclusive education whereby interaction and association between all students is encouraged to produce beneficial students to the society.

CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATION

5.1 Introduction

This chapter provides a summary of research findings of the study, conclusions and recommendation. Suggestions for further research are also given. The following discussion presents each of these aspects.

5.2 Summary of Research Findings

This section provides a summary of the research finding based on the research objectives that were formulated by the study. It also makes a conclusion on the findings and recommendation for improvements and further research.

5.2.1 The status of resources/facilities available/ unavailable/ and their adequacy to students with special needs that are required to facilitate implementation of inclusive education.

The study revealed that the VI were provided with most of the resources but they were inadequate. It was indicated by (65.4%) who said the resources were inadequate and they lacked very important resources that is Braille papers which was the main material for writing.

In the study the PH revealed that they could use most of the resources used by student without special needs although 54.5% stated that the resources are inadequate. In terms of accessibility to these facilities, they lacked wheel chairs and their maintenance.

The HI student said that they could use all the resources available in the university though he lacked sign language interpreter and hearing aids.

The study also revealed that the resources/facilities used by students with albinism are available but 50% of these were inadequate. Also they use the same recourses/facilities as the VI.

5.2.2 The teaching and learning methodology for training students with special needs

The study showed that there are different methods used by lecturers in teaching students with special needs. The first method used was interaction between SSN and lecturers. The study revealed that more than a half of the lecturers (54.2%) understand how to provide interaction between students with and without special needs.

The second method used was how to modify the curriculum content to suit special needs students. The study showed that 50% of the lecturers understand how to modify the curriculum content to suit special needs students and 50% of them did not know how to modify the curriculum for those who require.

About the instruction flexibility, the study revealed that 50% of the lecturers understand how to provide instructional flexibility in a class with SSN students and 47.4% do not understand.

Lastly, evaluation of students' performance with special needs by the lecturers was another method. The study showed that most of the lecturers (62.5%) did not understand how to evaluate the SSN students in the class.

About the appropriateness of the teaching/learning methodology, the data revealed that most the students with special needs (77.7%) said the teaching/learning methodology was appropriate but with an exception of the HI who found it not appropriate at all.

5.2.3 The accessibility of university facilities, transport facilities and suitability of accommodation services.

The study showed that students with special needs have accessibility to university facilities. This was revealed by the total of (95.6%) of students with special needs who said that they have accessibility.

On the transport services provided in the university, the study revealed that the means of transport to the lecture rooms and hostels were frequent although the H.I and Albinism did not necessarily require them.

The study showed that the accommodation services in the university provided to the students with special needs was suitable. This was revealed from the data that (93.4%) of the students with special needs said accommodation services were suitable.

5.2.4 The attitudes of Students with Special Needs (SSN) in Kenyatta University towards inclusive education.

This study revealed that students with special needs are comfortable in an inclusive environment. This is indicated by 93.3% of students who said they were comfortable. They said that they gained a lot from learning with their peers and they feel accepted in the university. Although the SSN were comfortable in an inclusive education, they have faced stigmatization at least once which was shown at 71.1% of students who said they have been ever stigmatized.

The SSN stated that the attitudes of other students towards them were good at 97.7% which was evenly distributed among them. This was further shown by the readiness of students without special needs who were ready to assist them which was shown at a high percent of 80% of the respondents.

5.3 Conclusion

From the study findings, it can be concluded that ;despite the fact that inclusive education has been implemented in Kenyatta university for the last two decades, there is no clear guideline, awareness and policy to be followed to ensure it is effectively implemented .

Lack of knowledge on inclusive education and proper environment especially with the planners and lecturers is the biggest barrier to the implementation of the inclusive education.

Based on the study objectives, the conclusions are;

1. Most of the resources/facilities are available but not adequate. Although there are those resources/facilities that are necessary but not available to them for instance for the V.I they lack brail materials, P.H lack wheel chairs and tri-cycles, H.I lacks sign language interpreters and hearings aids and albinism lack the soft copy notes.
2. The understanding of the methods were average which was not effective to ensure the learning process takes place. The methods used by the lecturers to teach in an inclusive education were; interaction of students with special needs and students without special needs, curriculum modification of content to suit SSN, instructional flexibility and evaluation of students performance in class.
3. The accessibility of university facilities, transport services and accommodation in the university were suitable to the SSN.
4. Students with special needs were comfortable since they were accepted, gained a lot from others and students without special needs were ready to assist them. But still the SSN are stigmatized at least once in the university.

5.4 Recommendation of the study

The study revealed gaps and the weakness of the implementation of effective inclusive education in Kenyatta university. The study made the following recommendations that could be useful in strengthening and improving the existing implementation of inclusive education;

- i. For an effective teaching/learning to take place there should be adequate resources/facilities. Therefore the university management should come up with a strategic policy that will ensure the provision of all resources/facilities for all the students with special needs. The university should also employ more resource room personnel who have skills and knowledge on how to provide services for SSN and have different resource rooms to cater for each group of SSN.
- ii. The Kenyatta university management should provide training for the lecturers to improve their knowledge and skills in teaching students with special needs which could be provided through workshops and seminars on inclusive education. Also an inter-departmental approach should be encouraged where lecturers can interact with their peers and share the knowledge with those who have training in special needs education.
- iii. The university management should have a strategic plan for continuous maintenance and increase of all the physical accessibilities to the facilities, transportation and accommodation.
- iv. The university should provide awareness plan of their students with special needs through seminars/ workshops, creating a university common course on

inclusive education and increase programmes on disability sensitization so as to enhance inclusivity for all persons in the university.

5.5 Suggested areas for the further research

The present study identified the implementation of inclusive education in Kenyatta University which admits SSN . The recommendations for further research are:

1. This research covered the general categories of disabilities .Further research should concentrate to each kind of disability in detail for example VI there those who have low VI and those who are fully blind and PH there those who use wheel chairs and those don't use wheel chairs.
2. The research should be carried out on attitudes of the students without special needs towards inclusive education and its benefits.

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APPENDIX 1

TYPES OF QUESTIONS TO BE USED IN THE QUESTIONNAIRES AND INTERVIEW

i. Unstructured Open-Ended Questions

These are types of questions in which the respondents have complete freedom to express their views about a particular phenomenon. The amount of space provided indicates whether a brief or lengthy answer is required. In some cases, only a figure is required. For example, what improvements do you think the University should undertake to improve its standards?

ii. Structured Closed-Ended Questions

These are questions which are accompanied by a list of possible alternative versions that respondents are required to select the answers that best describe their opinions. For example. How frequent is your transport to lecture rooms?

- Very frequent
- Frequent
- Not frequent
- Not at all

ii. Contingency Questions

In particular cases, some specific questions are only applicable to certain groups of respondents. Follow-up questions are needed to get further information from the relevant sub-groups only. For example

a. Apart from being Visually Impaired, do you have any other type/types of disabilities?

- Yes
- No

b. if yes above in 7 a specify the disability_____

c. If you answered 7 b above give extra challenges you face in accessing curriculum

i)_____

ii)_____

iii)_____

APPENDIX 2

STUDENTS QUESTIONNAIRE

This is a questionnaire to study the implementation of inclusive education in Kenyatta University. It contains both open and closed ended questions. The respondents are requested to answer all question to the best of their ability.

For the visually impaired students, type your responses in Braille on the papers provided.

All information provided in this research will be treated with utmost confidentiality.

Please (√) where appropriate and for V.I fill in your response.

1. Sex a) Male b) female
2. Year of study 1 b. Year of joining _____
 2
 3
 4

3. In which department are you in?

4. Which kind of disability do you have?

1. VI
2. PH
3. HI
4. other _____

5. a) What specific educational resources are available for you as a special need student?

- i) _____
- ii) _____
- iii) _____
- iv) _____

b) Are they adequate?

Yes No

c) If no which ones are not adequate but are necessary.

6. As a special needs student what curriculum needs are necessary but you lack?

7a) Do you feel comfortable in inclusive classrooms? Yes No

b) Elaborate your answer.

8. a) Are the teaching methodology used by lecturers appropriate?

i) Very appropriate

ii) Appropriate

iii) Less than appropriate

iv) Not appropriate

a. In what ways do you think lecturers could improve in their teaching methods?

9. Generally how accessible are your lecture rooms?

i) Highly accessible

ii) Averagely accessible

iii) Low accessibility

10. How available is the transport to your lecture rooms?

i) Very frequent

ii) Frequent

iii) None

11. How available is the transport to your hostels?

a) Very frequent

b) Frequent

c) None

12. How appropriate are pedestrian walk to the classroom?

- i) Very appropriate
- ii) Appropriate
- iii) Less appropriate

13 How suitable are the accommodation services?

- a) Very suitable
- b) Suitable
- c) Not suitable

14. a) How do you describe the attitude of other students towards you?

- a) Very good
- b) Good
- c) Poor
- d) Very poor

b) As a special needs student have you ever experienced any stigma being in an inclusive environment? Yes No

15. How readily do other students come to your assistance when you require it?

- a)Very readily
- b) Readily
- c)Not very readily
- d) Not at all

16 . Make other recommendations concerning curriculum implementation in the inclusive environment in Kenyatta University.

APPENDIX 3

LECTURERS QUESTIONNAIRE

This is a questionnaire to study the implementation of inclusive education in Kenyatta University. It contains both open and closed-ended questions. The respondents are urged to answer all questions to the best of their ability.

All information provided in this research will be treated with utmost confidentiality.

Please (√) where appropriate.

SECTION A

1. Gender a) Male b) Female

2. Which is your department?

Education Religion Special education

History

3. What are your education qualifications?

4. Which is your area of specialization?

5. Do you have students with disabilities in your classes?

Yes No

If yes, please specify-----

6. (a) Do you understand how to teach students with disabilities?

(a) Don't understand

(b) Somehow understand

(c) Understand

(d) Fully understand

(b) If your answer is b, c, or d, please specify.....

7. Do you understand how to encourage interactions between students with special needs and students without special needs?

- (a) Don't understand
- (b) Somehow understand
- (c) Understand
- (d) Fully understand

(b) If your answer is b, c, or d, please specify.....

8. Do you understand how to modify the curriculum content to suit special needs students?

- (a) Don't understand
- (b) Somehow understand
- (c) Understand
- (d) Fully understand

(b) If your answer is b, c, or d, please specify.....

9. Do you understand how to provide instructional flexibility in a classroom with special need students?

- a) Don't understand
- b) Somehow understand
- c) Understand
- d) Fully understand

(b) If your answer is b, c, or d, please specify.....

10. Do you understand how to accommodate special needs students in your classroom?

- a) Don't understand
- b) Somehow understand
- c) Understand
- d) Fully understand

(b) If your answer is b, c, or d, please specify.....

11. Do you understand the resources required by your special need students?

- a) Don't understand
- b) Somehow understand
- c) Understand
- d) Fully understand

(b) If your answer is b, c, or d, please specify.....

12. Do you understand how to evaluate the special need students in your classroom?

- a) Don't understand
- b) Somehow understand
- c) Understand
- d) Fully understand

(b) If your answer is b, c, or d, please specify.....

13. As a lecturer in the university, what recommendations would you make in terms of inclusive education?

APPENDIX 4

DEPUTY VICE CHANCELLOR (ACADEMIC) INTERVIEW SCHEDULE

This is an interview schedule to study the implementation of inclusive education in Kenyatta University. The respondent is urged to answer all questions to the best of his/her ability.

All information provided in this research will be treated with utmost confidentiality.

1. What do you think is the concept of inclusive education?
2. Have you included inclusive education in your strategic plan?
3. Do you involve other academic staff when making decisions concerning inclusive education in the university?
4. How do you carryout the process of inclusion in the university?
5. How do you have any staff development programs concerning inclusive education in the university?
6. What curriculum barriers in the implementation of inclusive education?
7. What do you think are the measures to be put in place to improve accessibility in lecture rooms?

APPENDIX 5

CHECKLIST

This is an actual resources/equipment available.

1. Number of brailers_____
2. Number of resource staff for the special need students_____
3. Number of diagrams/charts available_____
4. The equipment available for the hearing impaired_____
5. Equipment available for the physically handicapped._____
6. Library facilities
 - Computers with JAWS
 - Equipments for SSN
 - Books

APPENDIX 6

THE MAP OF KENYATTA UNIVERSITY

APPENDIX 7

KENYATTA UNIVERSITY AUTHORIZATION LETTER



KENYATTA UNIVERSITY

OFFICE OF THE DEPUTY VICE-CHANCELLOR (ACADEMIC)

INTERNAL MEMO

FROM: DEPUTY VICE-CHANCELLOR (ACADEMIC)

TO: GEORGE NGUNDO KIMANI

E35/10276/2008

EDUCATION MANAGEMENT, POLICY AND CURRICULUM STUDIES

KENYATTA UNIVERSITY

DATE: 13th April, 2011

REF: KU/DVCACAD/GEN/9/DF/VOL 6/79

SUBJECT: REQUEST TO CONDUCT RESEARCH

Your request regarding the above subject refers.

I wish to inform you that your request has been approved. You are required to liaise with the Director, Institute for Research Science and Technology before commencing data collection.

You will also be required to submit your report both in soft and hard copy to the Moi Library after completion of your research.

Thank you

A handwritten signature in black ink, appearing to read 'Jacton O. Ogeno'.

Dr. Jacton O. Ogeno
Ag Deputy Vice Chancellor (Academic)

Cc Vice-Chancellor

JO/jk

APPENDIX 8

NCST RESEARCH AUTHORIZATION LETTER

REPUBLIC OF KENYA



NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

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

P.O. Box 30623-00100
NAIROBI-KENYA
Website: www.ncst.go.ke

Our Ref: **NCST/RRI/12/1/SS-011/181/4**

Date:
24th February 2011

George Ngundo Kimani
Kenyatta University
P. O. Box 43844
NAIROBI

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*Implementation of inclusive education in Kenyatta University, Kenya*" I am pleased to inform you that you have been authorized to undertake research in **Nairobi Province** for a period ending **31st March 2011**.

You are advised to report to **the Vice Chancellor, Kenyatta University** before embarking on the research project.

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


P. N. NYAKUNDI
FOR: SECRETARY/CEO

Copy to:

The Vice Chancellor
Kenyatta University
P. O. B ox 43844
NAIROBI

APPENDIX 9

RESEARCH CLEARANCE PERMIT

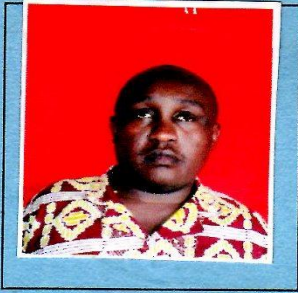
PAGE 2 PAGE 3

THIS IS TO CERTIFY THAT:

Prof./Dr./Mr./Mrs./Miss..... GEORGE
NGUNDO KIMANI
 of (Address) KENYATTA UNIVERSITY
P.O. BOX 43844, NBI
 has been permitted to conduct research in
KENYATTA UNIVERSITY Location,
 District,
NAIROBI Province,
 on the topic... IMPLEMENTATION OF
INCLUSIVE EDUCATION IN KENYATTA
UNIVERSITY, KENYA.

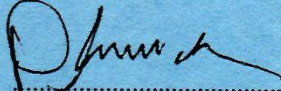
 for a period ending... 31ST MARCH, 20... 11.....

Research Permit No. NCST/RRI/12/1/SS-011/181
 Date of issue 25/02/2011
 Fee received SHS 1,000



GNK


.....
 Applicant's
 Signature



.....
 Secretary
 National Council for
 Science and Technology

CONDITIONS

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



REPUBLIC OF KENYA
RESEARCH CLEARANCE PERMIT

GPK6055t3mt10/2009 (CONDITIONS— see back page)